Politics of Food: An Experiment on Trust in Expert Regulation and Economic Costs of Political Polarization*

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Abstract

Rising polarisation heightens concerns about politicising regulatory agencies, prompting reassessment of the accountability–independence trade-off. We study whether perceived out-group oversight affects trust in regulation and market behaviour. Using US television transcripts, we show that media link agencies with presidents. We then conduct a field experiment (N=5,566) using a case where the EPA endorsed antibiotic spraying on citrus crops during both Trump's and Biden's presidencies. Holding science constant, out-group oversight reduces support for spraying by 26%, lowers trust in EPA's evaluation, and increases donations to an opposing NGO by 15%. In an obfuscated follow-up, citrus demand is unchanged, but effects differ by consumption habits.

JEL Classification: D12, D83, P16, Q11, Q13, Q18, Z18

Keywords: political polarization, civil service, trust in regulation, trust in science, food policy, partisan identity, consumer demand

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1 Introduction

Political polarisation in the US has been rising since the 1980s (Iyengar et al., 2019; Boxell et al., 2024), intensifying concerns about the *politicisation* of regulatory agencies.[1] These agencies are intended to rely on scientific and technical expertise to regulate key markets—such as medicine and food, with the latter worth $833 billion annually in the US alone.[2] However, growing perceptions of politicisation may undermine their credibility, reduce public trust in regulation, and affect both demand for regulated goods and take-up of socially beneficial products, such as vaccines.[3]

This paper presents novel field experimental evidence on how citizens' perceptions of agency partisanship affect trust in expert regulation and downstream economic decision-making. Partisan distrust may extend to both independent and executive agencies, as presidential administrations are frequently associated with regulators in media coverage——a connection we document empirically using TV transcript data. Our inquiry contributes to the broad debate on agency design: should we prioritise independence and meritocracy of regulatory bodies at the expense of electoral accountability? Or should legitimacy through increased executive oversight be accepted, despite the risk of political capture? Re-examining this trade-off is especially pressing in light of Republican efforts to dismantle civil service protections under the Pendleton Act and increase oversight over agency spending, which would further erode agency independence and heighten perceived politicisation.[4]

To that end, we experimentally address the following research questions. First, we ask how does the political affiliation of the president, either in-group (from one's preferred party) or out-group, influence trust in agencies and their regulations. Second, we study the consequences for economic decisions. We measure the impact of out-group administration on the support

[1] We refer to regulatory agencies broadly to include independent regulatory agencies and commissions (e.g. SEC), independent executive agencies (e.g. EPA), and other executive agencies and departments that enact and enforce regulations (e.g. FDA). In practice, the degree of independence varies both across and within these broad categories, depending on factors such as appointment rules, budgetary authority, qualification requirements, regulatory powers, and institutional tradition. For further discussion, see Verkuil (1988); Datla and Revesz (2013); Breger and Edles (2015); Selin (2015).

[2] https://www.statista.com/outlook/cmo/food/united-states, accessed 2024-07-17.

[3] The current polarised environment makes studying the impact of political signals on trust in regulation particularly important. In fact, a key component of affective polarisation is distrusting out-party supporters (Iyengar et al., 2019), even if they hold expertise on a given topic (Alabrese et al., 2024).

[4] On proposed measures to strip employment protections from civil servants, see: https://www.nbcnews.com/politics/2024-election/trump-schedule-f-executive-order-stop-civil-servantsgovernment-rcna128003, accessed 2024-07-17. On spending oversight, see Executive Order 14125, which gives the Office of Management and Budget (OMB) more powers in overseeing agency spending.

for expert regulations and donations to NGOs that oppose them. Moreover, we quantify the effects on demand for regulated goods. Answering these questions speaks to the trade-off between independence and accountability of regulatory agencies by testing whether, and to what extent, their perceived dependence on the executive undermines trust among out-party supporters. With people inevitably living much of their lives under out-group administrations, understanding the economic consequences of this distrust is crucial.

To tackle these questions, we designed an information provision field experiment about citrus greening, a disease decimating citrus crops. We exploit a unique opportunity presented by an Environmental Protection Agency (EPA) policy that was issued during the Trump administration and subsequently challenged in court during the Biden administration—in both cases the EPA defended the safety of spraying crops with antibiotics to fight the disease and relied on the same scientific evidence to argue that direct and indirect risks to consumers are minimal (Section 2.4). This allowed us to *randomise* the apparent partisanship of the EPA while holding the scientific arguments *constant*.

We recruited a sample of N=5,566 US Democrats via Prolific,[5] a platform that allows researchers to find participants with specific characteristics.[6] Upon collecting demographic data, including baseline levels of orange juice consumption, all participants received information about citrus greening and antibiotic spraying of citrus crops. Subsequently, we randomised them into one of three experimental groups: (1) *Biden* treatment (40% chance), (2) *Trump* treatment (40% chance), or (3) *Control* (20% chance). In the two treatment groups, participants learnt about potential risks that were flagged by opponents of the antibiotic spraying. This was followed by the EPA's justification for the policy, including excerpts of scientific evidence used by the EPA to argue that the practice was safe. Participants in the Control group did not learn about the opponents' or the EPA's stance.

In the Trump group, we stated that "the EPA under the administration of President Donald Trump provided arguments and scientific evidence supporting the position that antibiotic spraying of citrus crops poses little risk and meets the regulatory and safety standards." The Biden treatment was identical to the Trump one, except that we replaced all mentions of Trump with Biden. In both groups, we displayed a photo of the respective president—we randomised whether it was a photo of the president shaking hands with the EPA's head or the

[5]See Section 3.1.1 for reasons why we pre-registered to conduct the study with a sample of Democrats.
[6]Prolific offers high data quality relative to competitors e.g., CloudResearch, Dynata (Peer et al., 2022).

president's portrait.[7] Including a photo with a caption is a natural addition to the text—when regulation is presented in the news, it is accompanied by photos (websites) or video footage (TV). We also presented a list of specific arguments made by the EPA's scientists. Crucially, the arguments did not vary by treatment. Thus, we achieved our goal of exogenously varying the apparent political affiliation of the EPA, holding all else constant.

After the intervention, we elicited support for the antibiotic spraying of citrus crops and willingness to donate to the United States Public Interest Research Group (USPIRG), a non-partisan, non-profit organisation advocating against the antibiotic spraying.[8] We also collected secondary outcomes, including an index of trust in the EPA's scientific evaluation.[9]

Three days after the initial survey, we invited participants to an obfuscated follow-up study to elicit treatment effects on demand for citrus products. The survey focused on grocery store preferences, a topic very different from the subject matter of the original survey. The two surveys used consent forms and domains from different institutions, adhering to the state-of-the-art recommendations for obfuscation (Haaland et al., 2023). Following decoy questions, we offered participants a chance to bid for a product-specific Amazon gift card for one of the goods mentioned in the survey—orange juice.[10] We used a multiple price list, with participants being asked to make choices between the fixed value product-specific gift card ($8) and variable amounts in cash. We randomly implemented one of the choices. We provided everyone receiving a gift card with an anonymous link, which enabled them to add it to their Amazon account. All participants ex-ante learnt that the gift card can only be applied to orange juice purchases.[11] Our method does not require collection of personally identifiable information (PII), such as an email or a physical address. Thus, the method complies with terms of service of survey platforms, allowing willingness to pay (WTP) elicitation in large-scale online experiments. Moreover, there are over 160 million Amazon Prime users in the US (over 60%

[7] We cross-randomised photos to demonstrate that choosing a specific image does not drive the results. We do not find heterogeneous effects on the support for the regulation, trust levels, or NGO donations.

[8] Participants split a $1 bonus payment with USPIRG in any way they wanted.

[9] Other secondary outcomes include an incentivised measure of beliefs about partisan support for the regulation. We also elicited planned consumption of orange juice (for a random subsample of 15% of respondents), and inquired about determinants of the plan (internalities vs externalities). See Section 4 for the results.

[10] To further enhance the obfuscation, participants were told that they will be asked to bid for a randomly assigned product from the set of products previously mentioned in the survey. We did indeed randomise the assigned product—either orange juice or shampoo, though the latter option had only 1% probability.

[11] We tested that participants understood the relevant instructions using a comprehension question. 96% correctly indicated that they cannot use the gift card for products other than orange juice.

of adults),[12] which makes the gift cards convenient to participants.[13]

We now discuss the results of the paper. The out-group presidential administration reduces support for the EPA's antibiotic spraying policy by 26% ($p<0.001$). Specifically, 28.6% of individuals in the Biden group prefer spraying to remain legal compared to 21.1% in the Trump group. Our pre-registered index of support, based on agreement with four statements, exhibits the same pattern ($p<0.001$). In addition, the treatment affects trust in the EPA's evaluation. Although both groups were shown identical scientific evidence used by the EPA to conclude that the antibiotic spraying is safe, the trust index was significantly higher in the Biden group than in the Trump group ($p<0.001$). Despite the role of regulatory agencies (such as the EPA) as providers of merit-based expertise, support for and trust in their regulations is strongly affected by the president's political affiliation, with whom they are formally linked by institutional design. With agencies regulating critical products such as vaccines and food, this poses potential health risks, and raises concerns about broader consequences of a possible rolling back of the Pendleton Act and other measures strengthening the executive dependence (e.g., increased powers of the OMB over agency spending.).

The second set of results explores whether distrust translates into economic behaviour. The out-group presidential administration increases donations to a non-partisan NGO opposing antibiotic spraying by 15% ($p<0.001$). Specifically, Democrats in the Trump group donated 39.4% of their bonus to USPIRG, compared to 34.3% in the Biden group. Moreover, an Epps-Singleton test rejects the null that donation distributions are identical ($p<0.001$). These findings show that the perception of partisan oversight, and thus the choice to have political oversight of regulators at all, can shape economic decisions. Importantly, this is not simply a measure of in-group favouritism. We emphasised to participants that USPIRG is non-partisan, science-focused, and unaffiliated with any political campaign.

Finally, we discuss treatment effects on the WTP for orange juice Amazon gift cards, measured in the follow-up survey. Despite having power to detect effects as small as 0.09-0.1 SD, we find no overall effect of the out-group presidential administration on the WTP. The differences across groups are not significant, with an \$8 orange juice gift card, on average, worth \$1.69 in the Trump group, \$1.61 in the Biden group, and \$1.64 in the Control.

Due to potential demand heterogeneity for habitual vs occasional consumers, we pre-

[12] https://www.emarketer.com/chart/248275/, accessed: 2024-10-04.

[13] Amazon Prime users do not have to pay the delivery costs of Prime-eligible items. Many citrus products covered by our custom gift cards were Prime-eligible.

registered analysis by pre-treatment orange juice consumption.[14] Demand responses differ: while the effects of out-group vs in-group presidential administration for the low consumption bin (−5.1%) and the high bin (13.8%) are insignificant, the difference is significant (p=0.084), indicating heterogeneous effects. We observe a similar pattern for Trump vs Control. Consistent with these results, we observe increases in USPIRG donations in the Trump treatment relative to the Biden group by 26.3% (p<0.001), 13.7% (p=0.02), and 6.0% (p=0.36) for the low, medium, and high consumption bins, respectively. Frequent consumers are less responsive, while marginal ones are more reactive. Together, the results suggest that the perception of partisan oversight has the potential to affect economic outcomes. However, distrust in regulation may not translate into reduced demand, on average. This is notable given that food safety is particularly fear-inducing, according to Pew Research Center data[15] and research studies (e.g., Hwang et al., 2005; Lusk et al., 2006; Dahlhausen et al., 2018).

We conducted a supplementary experiment with 1,050 participants to examine how treatment effects on regulation support, trust in the EPA's evaluation, and planned citrus consumption vary by baseline trust in regulatory agencies. The out-group presidential administration significantly reduces all three outcomes, corroborating our original findings. Moreover, treatment effects on planned citrus consumption are stronger among individuals with low baseline trust in regulatory agencies and the EPA specifically. In contrast, heterogeneity in treatment effects for regulation support and trust in the EPA's evaluation is directionally consistent but weaker and statistically insignificant. Overall, signals of out-group partisan oversight appear strong enough to uniformly reduce trust and regulation support regardless of baseline agency trust, but they influence consumption decisions only among those with low pre-existing trust in the agency.

We perform several additional robustness checks. First, the take-up of the follow-up survey was high at 88%, with no evidence of differential attrition—either across all groups or between Biden and Trump conditions—and no observable imbalances among follow-up respondents. Second, to test whether the EPA is perceived as unusually politicised, we cross-randomised whether the information intervention named the EPA or referred to the "relevant regulatory

[14]Consumers that frequently purchase orange juice may be less sensitive to potential individual risks associated with antibiotics for several reasons including habit formation, subjective risk perceptions, status quo bias, or loyalty.

[15]According to Pew Research Center's data, 80% of Americans believe that meat from animals given antibiotics or hormones poses health risks (32% say that it poses a great risk). The proportions are almost the same for fruits and vegetables grown with pesticides. The survey is available at https://www.pewresearch.org/internet/2018/11/19/public-perspectives-on-food-risks/, accessed: 2024-10-06.

agency."[16] We find no evidence of heterogeneous treatment effects (Biden vs Trump) based on this wording. One may also worry whether participants believed the spraying continues until today. To address this, we highlighted in the survey that streptomycin spraying was permitted to continue as of December 2023. As a result, almost 90% of participants indicated that the spraying is ongoing. We also report robustness of our results to re-weighting observations to match Democrat-identifying Americans on age, race, gender and education.

Lastly, one may worry that the overall null effect on the WTP for orange juice gift cards is driven by people no longer considering the experimental information at the point of elicitation. We conducted an obfuscated follow-up survey with participants of the supplementary experiment and established that they remain much more familiar with the EPA's regulation than those who did not learn about citrus greening in the first survey, and that they can successfully recall the president in power according to their treatment group. We also show that the treatment-induced trust differences persist in the follow-up survey, implying that the overall null effect on the WTP is due to distrust not translating into real consumption decisions. See Section 4.4.2 for more details.

Our results on how the administration in power affects trust and support for regulation issued by formally meritocratic and science-driven agencies naturally lead to the question of whether news reporting makes the executive oversight salient. To address this, we analyse TV news transcript data using GDELT Television Archive from 2009 to 2024. The data is organised into 15-second intervals. For each interval mentioning a regulation by an agency, we check whether it also mentions the president. Combining the intervals at the agency-station-show-date level, we find that in 37% of cases where the regulation is mentioned, a presidential administration is also named—40% for executive agencies and 34% for independent agencies. Since we require both to be mentioned within just 15 seconds, these are very high proportions.[17] We conclude that the association between the president and the agencies in media reporting on regulation is generally salient.

Our work relates to four strands of literature. First, we contribute to research on the economic consequences of political polarisation (Iyengar et al., 2019) and cultural divergence (Bertrand and Kamenica, 2023). Using a novel experimental design, we assess the economic

[16] Given the regulation's focus on antibiotics, participants were unlikely to expect the EPA to be responsible, as opposed to the FDA or CDC.

[17] The share was even greater for the EPA (53%), the agency relevant to the experiment. The proportion remained fairly stable in the last 15 years, with a peak during Trump's presidency. The shares do not depend on political leaning of the TV station, with Fox, CNN, and MSNBC data showing similar patterns.

costs of perceived politicisation of expert agencies, addressing a gap in studies on political signals and economic outcomes, which neglect regulators. Prior work focuses on political signalling by job applicants and sellers (Gift and Gift, 2015; McConnell et al., 2018), and on consumer responses to company- and product-level cues, with mixed evidence (Liaukonytė et al., 2023; Schoenmueller et al., 2023; Liaukonyte et al., 2024; Hou and Poliquin, 2024; Conway and Boxell, 2024); Bursztyn et al. (forthcoming) highlight politicisation in healthcare policy adoption. Unlike those contexts—where political signalling is a choice or easy substitution is feasible—partisan signals from expert agencies are unavoidable, and consumers struggle to substitute away from regulations that apply to entire markets or essential goods.[18] Our empirical results offer four insights: we document the salience of presidential oversight over agencies in the media; show that perceived politicisation can affect economic outcomes (NGO donations); highlight that partisan distrust in regulation does not always shift demand for the relevant product; and strengthen the case for studying polarisation trends and mitigation strategies (Levy, 2021; Boxell et al., 2024; Draca and Schwarz, 2024; Kashner and Stalinski, 2024; Braghieri et al., 2024; Robinson and Tazhitdinova, 2024).

Our paper also contributes to the literature on how partisanship shapes economic and policy perceptions. Prior work shows that partisanship influences how people evaluate macroeconomic conditions, such as inflation, unemployment, and inequality, with systematic cross-party differences consistent with partisan confirmation bias (Conover et al., 1986, 1987; Gerber and Huber, 2010; Alesina et al., 2020; Brady et al., 2022; Binetti et al., 2024; Binder et al., 2024). We extend this literature by examining perceptions of microeconomic policies that affect specific markets, such as the food sector. In addition, we focus on regulatory decisions by federal agencies that are, in principle, meritocratic and expert-led rather than partisan, and we provide evidence on the costs of perceived politicisation of such agencies. Finally, our study strengthens causal inference by relying on experimental evidence with incentivised outcomes, including NGO donations and willingness to pay for orange juice gift cards.

Our paper adds to the nascent literature on determinants of trust (Fehr, 2009) in institutions, a vital topic given its deterioration over time (Dustmann et al., 2017; Davies et al., 2021) and its welfare consequences (Gollwitzer et al., 2020; Bursztyn et al., 2023). Through our focus on agencies, we specifically add to the literature on trust in government and civil service (Acemoglu et al., 2020; Durante et al., 2021; Martinez-Bravo and Sanz, 2025). Our paper

[18] Firms can refrain from political references, and consumers can switch to alternative products; job seekers can omit political cues from CVs, and employers may reject applicants who signal incongruent partisanship. Expert agencies differ—partisan signals are unavoidable as the president has nominal oversight over them.

is timely given rising politicisation of the civil service and expected overturning of Pendleton Act protections. The results are also related to recent work on trust in science (Alabrese et al., 2024). We show the impact of perceived out-group political oversight on trust in scientific evaluation in a natural and highly consequential context of expert agencies. More broadly, we contribute to the question of the optimal design of regulatory agencies, specifically the trade-off between independence and accountability. We add to the growing research on the topic (Koop and Hanretty, 2018; Del Angel and Richardson, 2024; Schram and Ule, 2024) by quantifying how the perceived dependence on the executive undermines trust among out-party supporters, and what are the downstream economic consequences.

Lastly, we make a methodological contribution to the literature on measuring interventions' effects on demand (e.g., Hainmueller et al., 2015; Allcott et al., 2025). To our knowledge, we are the first to apply product-specific Amazon gift cards to estimate the willingness to pay for a good. The anonymous distribution makes our method suitable for measuring the WTP for products in large-scale online studies. We also demonstrate how to practically combine product-specific gift cards with solutions reducing experimenter demand effects (Haaland et al., 2023), thus aiding future research efforts relying on the new approach.

2 Background

2.1 Media Reporting

To motivate our study of the impact of out-group vs in-group partisan oversight on trust in regulatory agencies, support for their regulations, and related economic decisions, we first consider how perceptions about this partisan oversight might arise in the real world. Specifically, we explore one possible source of this perception—that news reporting makes the oversight salient.

We construct measures of news coverage of US agencies using data from the GDELT Television Archive. The archive contains transcripts of major US and international broadcast news networks organised into 15 second intervals. The intervals are derived from raw closed captions from the Television News Archive, with coverage starting in 2009. We restrict our analysis to Fox News, CNN, and MSNBC, which have complete coverage from 2009 to 2024. Using the GDELT 2.0 TV API, we conduct keyword searches for all intervals that contain the name and/or acronym of the following agencies: (1) independent executive agencies, (2) independent regulatory agencies, (3) executive departments, and (4) agencies under executive

departments.[19] For each snippet, the query returns the text from the interval, the station name, show name, and date that the show was aired. Because each snippet only contains the text of 15 second intervals, we combine snippets into news segments at the agency-station-show-date level. Using the interval text, we construct two binary measures of whether a segment contains a reference to: (1) new or existing regulations and (2) the current or previous presidential administrations. Limiting the sample to the top twenty agencies with the highest number of mentions, we identify 456,051 snippets and 167,765 segments in total. Among these segments, 33,260 contain a reference to a new or existing regulation and 52,681 contain a reference to the current or previous presidential administrations.

We show that in 37% of cases where a regulation is mentioned, a presidential administration is also named. The proportion is 40% for executive agencies and 34% for independent agencies. Since we require both to be mentioned within just 15 seconds, these are very high proportions. The share for the EPA, the agency relevant to the experiment, is even higher at 53%. The results by individual agency are reported in column (1) of Table 1. For completeness, column (2) reports the likelihood that the administration is mentioned during segments where an agency is mentioned but no regulation is discussed. Furthermore, Figure 1 shows the likelihood of mentioning the presidential administration when reporting on regulation over time (solid line). The likelihood remained fairly stable in the last 15 years, with a peak during Trump's first presidency. In the online appendix we show robustness of the results to extending the length of the text snippets to one minute.[20]

Figure 2 offers further insight by splitting time trends in joint mentions of regulations and presidential administrations by TV station. The likelihood that a presidential administration is mentioned when an agency regulation is discussed does not vary by TV network. In particular, there are no meaningful differences between the time trends for left-leaning outlets (CNN, MSNBC) and right-leaning outlets (Fox News), even during Trump's first term. Finally, in the online appendix we show that the share of EPA coverage with a negative tone varies substantially across the networks and over time. Notably, Fox News became less negative during the first Trump administration, while left leaning outlets display a marked increase in negative tone over the same period. After 2020, negativity on Fox rises again along with declines in

[19] We exclude the Department of Defense along with its sub-agencies and service branches.

[20] We designed a web crawler to access the snippet specific URLs that are provided in the responses to GDELT 2.0 Television API queries. The URLs contain the one minute video intervals and their associated transcripts. Similar to Djourelova et al. (2024), we scrape the relevant text for the one minute segment corresponding to each of the original 15 second snippets.

Table 1: Presidential Mentions in TV News Coverage of Agency Regulation

	Regulation		No regulation	
	N	President (%)	N	President (%)
Independent agencies	18023	34	33754	25
Federal Reserve	11857	32	12267	25
Environmental Protection Agency	3474	53	7237	34
Securities And Exchange Commission	681	23	3727	20
Federal Election Commission	329	37	2787	37
Federal Communications Commission	863	30	2224	24
Federal Trade Commission	290	16	1750	17
Small Business Administration	95	35	1675	24
Consumer Financial Protection Bureau	181	47	801	38
Federal Deposit Insurance Corporation	225	17	716	14
Social Security Administration	28	46	570	14
Executive agencies	15236	40	98787	25
Centers For Disease Control	3301	49	22571	29
Department Of Homeland Security	2136	60	20294	36
Internal Revenue Service	1676	52	16779	40
Health And Human Services	1396	53	11845	40
Food And Drug Administration	5019	31	11253	21
Alcohol Tobacco And Firearms	394	45	5525	13
Department Of Education	478	27	3897	23
Department Of Transportation	343	15	2795	11
Department Of Agriculture	251	26	2455	19
Department Of Labor	242	41	1373	25
All agencies	33259	37	132541	25

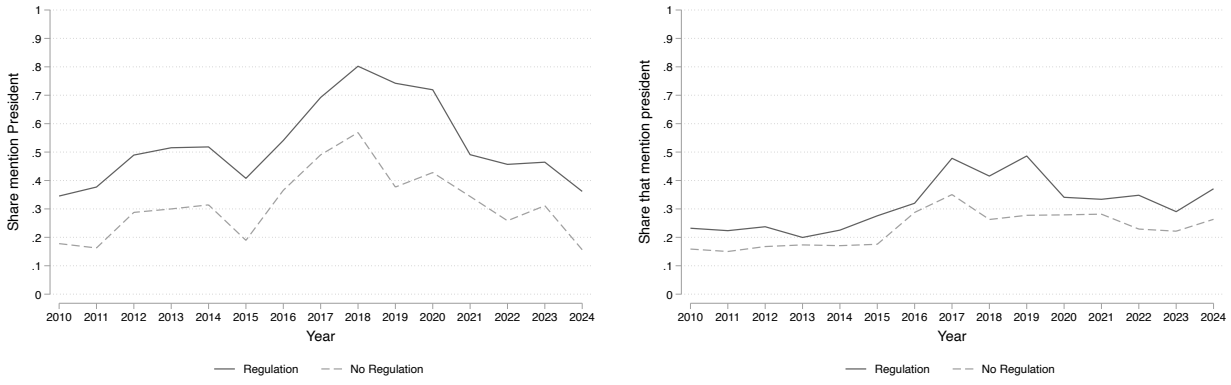
Note: We use the GDELT Television Archive dataset of transcripts of shows on three US news networks (Fox News, CNN, MSNBC) organised into 15-second intervals. For each interval mentioning a regulation by an agency, we check whether it also mentions the presidential administration. Combining the intervals at the agency-station-show-date level, we report the likelihood that where regulation is mentioned, the presidential administration is also named. We report these likelihoods in column (2) for 20 federal agencies with the highest number of mentions on MSNBC, CNN, and Fox News throughout the sample period. Separately, we report the likelihood that the administration is named during segments where an agency is mentioned but no regulation is discussed. The results are in column (4).

negativity on CNN and MSNBC, coinciding with the change in administration. This reversal reinforces our interpretation that media coverage makes presidential oversight of regulatory agencies salient, as the tone of reporting shifts depending on whether the administration's political alignment matches the network's ideological slant.

2.2 Citrus Greening Disease

The food industry worldwide is worth an estimated US$9.12 trillion in revenue per year,[21] and $833.8 billion in the US alone.[22] Of this, citrus production in the US accounts for around $2.5

[21] https://www.statista.com/outlook/cmo/food/worldwide, accessed 2024-08-02.
[22] https://www.statista.com/outlook/cmo/food/united-states, accessed 2024-08-02.



(A) EPA

(B) Top 20 Agencies

Figure 1: Presidential Mentions in TV Coverage of US Agency Regulation

Note: We use the GDELT Television Archive dataset of transcripts of shows on three US news networks (Fox News, CNN, MSNBC) organised into 15-second intervals. For each interval mentioning a regulation by an agency, we check whether it also mentions the presidential administration. Combining the intervals at the agency-station-show-date level, we report the likelihood that where regulation is mentioned, the presidential administration is also named (solid line). We also report the likelihood that the administration is named during segments where an agency is mentioned but no regulation is discussed (dashed line). **Panel A** shows the likelihood over time for regulation by the Environmental Protection Agency. **Panel B** demonstrates the same variable for the top twenty agencies with the highest number of mentions throughout the sample period.

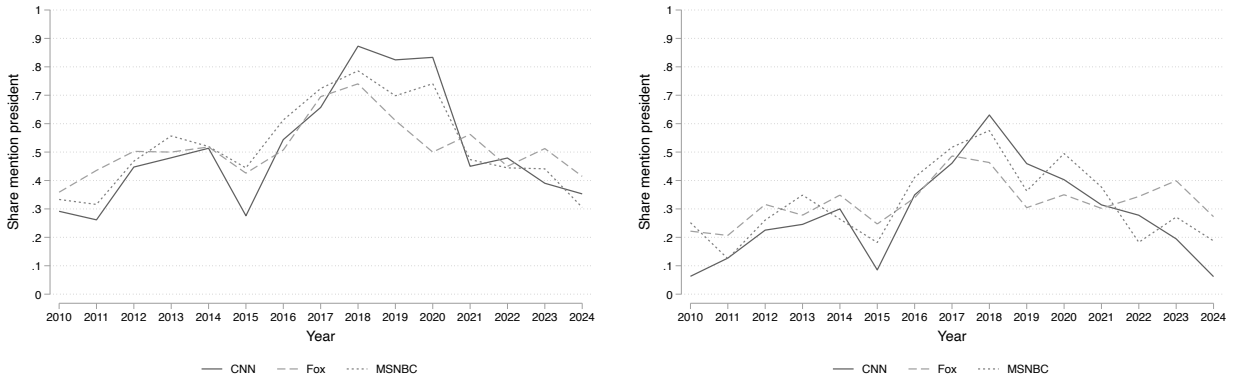
billion, being primarily based in California, Florida, Texas and Arizona (USDA, 2023). Pests and diseases remain a constant threat to the food industry. In five of the world's key crops, plant pest and disease outbreaks result in average yield losses between 17.2% and 30.0%, with range estimates as high as 41.1% (Savary et al., 2019).

Huanglongbing (HLB), also known as citrus greening disease, is a bacterial infection transmitted by the Asian citrus psyllid. It is an incurable disease which causes citrus trees to produce bitter fruit of poor quality and in most cases kills the tree within a few years of infection.[23] The Florida citrus industry has been greatly impacted by HLB since it was first observed in 2005.[24] Since its arrival, citrus production in Florida has decreased by 90% through to the 2022-23 season (USDA, 2024). Li et al. (2020) estimate that between 2015 and 2020, HLB generated over $1 billion in losses p.a. and 5,000 jobs lost each year. Since the disease is spread by a mobile transmission vector (insects), HLB poses a threat to the citrus industry in other citrus-growing states, being detected in parts of both California and Texas.[25]

[23] https://www.aphis.usda.gov/plant-pests-diseases/citrus-diseases/citrus-greening-and-asian-citrus-psyllid, accessed 2024-08-02.

[24] https://aglab.ars.usda.gov/learn-and-explore/citrus-greening-portal, accessed 2024-08-02.

[25] https://www.aphis.usda.gov/plant-pests-diseases/citrus-diseases/citrus-greening-and-asian-citrus-psyllid, accessed 2024-08-02.



(A) EPA

(B) Top 20 Agencies

Figure 2: Presidential Mentions in TV Coverage of Regulation, by Network

Note: We use the GDELT Television Archive dataset of transcripts of shows on three US news networks (Fox News, CNN, MSNBC) organised into 15-second intervals. For each interval mentioning a regulation by an agency, we check whether it also mentions the presidential administration. Combining the intervals at the agency-station-show-date level, we report the likelihood that where regulation is mentioned, the presidential administration is also named by news network. **Panel A** shows the likelihood over time for regulation by the Environmental Protection Agency. **Panel B** demonstrates the same variable for the top twenty agencies with the highest number of mentions throughout the sample period.

2.3 Antibiotic Spraying

In response, the citrus industry searched for ways to manage HLB. Foliar sprays of streptomycin, an antibiotic used to treat some bacterial infections in humans, had been shown to reduce the adverse effects of the disease, but not cure the disease.[26] Between 2016 and 2021, the Environmental Protection Agency (EPA), which regulates pesticide usage, issued several emergency approvals to use foliar streptomycin sprays pending a thorough review of its use.

On January 12, 2021, the EPA issued its final registration decision for the spraying of streptomycin on citrus crops.[27] In the associated report (henceforth, the EPA's report), the EPA considered the environmental impact of the proposal, including runoff and its effect on plants and animals, stating that the risks were similar to existing approved agricultural applications of streptomycin. The report also considered the possible impacts on human health. There was no concern of toxicity (with streptomycin being used for decades as a human antibiotic drug). However, the EPA labelled the risk of contributing to antibiotic resistance in bacteria as "medium", since greater usage could enable selection on streptomycin resistance in pathogens. Weighed against the potential benefits in treating HLB, which has only one alternative treatment—oxytetracycline—the EPA decided to permit foliar spraying

[26] https://www.regulations.gov/document/EPA-HQ-OPP-2016-0067-0010, accessed 2024-08-02

[27] https://www.regulations.gov/document/EPA-HQ-OPP-2016-0067-0229, accessed 2024-08-02.

of streptomycin for seven years, and would reassess the impact on antibiotic resistance based on monitoring.

The EPA's policy allowing streptomycin spraying on citrus, a practice that is unlawful in the European Union[28] and Brazil,[29] met opposition within the US. On March 25, 2021, a coalition of public interest groups launched a legal challenge against the final registration decision. In response, the EPA submitted their respondent's brief, outlining the legal defence of the decision. In particular, the brief made extensive reference to the EPA's report, and the scientific evidence and evaluations which formed the basis of the final registration decision, in order to defend the decision. Ultimately, the policy was struck down on procedural grounds in December 2023,[30] and spraying of streptomycin was phased out by the end of 2024.

2.4 Suitability for Experiment

The particular circumstances of the EPA's decision to allow streptomycin spraying on citrus crops makes it ideal for studying the impact of the perceived partisan oversight of expert agencies on trust and consumer behaviour. First, the circumstances of this policy mean that we are able to generate a truthful information provision treatment in which we hold the science supporting the policy constant, while varying only the identity of the presidential administration overseeing the EPA when those scientific statements are supported. The EPA's report,[31] which was published in the final months of the first Trump presidency, makes scientific claims that were later directly cited by Biden's EPA to defend the policy against the legal challenge.[32] These claims form the basis of our treatment.

Second, the spraying policy is not well-known. When asked "Before taking this survey, how familiar were you with the following issues?" on a scale from 0 ("Never heard of the issue") to 100 ("Very familiar"), our participants' average response was 14.89 for "Citrus greening disease" and 15.25 for "Antibiotic spraying to fight citrus greening". This benefits

[28] Streptomycin has never received approval for use as a pesticide under the EU's pesticide regulation Reg. (EC) No 1107/2009. https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/start/screen/active-substances/details/1175, accessed 2024-08-02.

[29] https://www.gov.br/anvisa/pt-br/setorregulado/regularizacao/agrotoxicos/monografias/monografias-excluidas-por-letra, accessed 2024-08-02. Listed as E15 – Estreptomicina.

[30] Specifically, for not adequately considering the impact of the policy on endangered species and pollinators, and for not sufficiently explaining the choice to label streptomycin as a preventative measure as opposed to just a treatment, for which there is substantial evidence. The court upheld the EPA's assessment of health-related risks.

[31] https://www.regulations.gov/document/EPA-HQ-OPP-2016-0067-0229, accessed 2024-11-17.

[32] A copy of the brief is available on the website of one of the complainants: https://www.nrdc.org/sites/default/files/72-epa-brief-corrected-citrus-20221027.pdf, accessed 2024-11-17.

our experimental design as it decreases the probability that prior information attenuates the effect of our information treatment.

Third, consumers care a lot about the presence of antibiotics in food production. Pesticides and antibiotics rank highest among controversial food technologies for consumer concern (Hwang et al., 2005), and consumers have a high willingness to pay for foods produced without antibiotics (Dahlhausen et al., 2018; Bernard and Bernard, 2009; Lusk et al., 2006). Therefore, changes in trust regarding the health effects of crops treated with antibiotics have considerable potential to shift demand for the underlying good, and thus provide us a strong opportunity to measure any market impacts caused by perceived partisan oversight of regulators.

Taken together, these factors allowed us to generate a strong and truthful information treatment in which we hold the EPA's scientific claims constant while varying the partisanship of the presidential administration.

3 Experiment Design

Our experiment consists of two surveys. During survey 1 (Section 3.1), we conduct an information intervention about spraying antibiotics to combat citrus greening. In particular, we provide scientific arguments about the safety of spraying, which were held constant across our two treatment conditions. Crucially, we randomise the partisanship of the presidential administration (in-group vs out-group) during which the EPA supported the arguments. We also measure several outcomes, including support for the spraying, trust in EPA's evaluation of its safety, and donations to an NGO opposing the practice. Second, in the obfuscated follow-up survey (Section 3.2), we elicit treatment effects on demand for citrus products. Figure 3 summarises the structure of the entire experiment.

3.1 Survey 1

3.1.1 Recruitment

We recruited a sample of Democrats from Prolific—an online survey and experiment platform.[33] To screen for Democrats, we relied on Prolific's pre-screener questions, which ask "In general, what is your political affiliation?", recruiting only those who responded "Democrat", where the remaining alternatives were "Republican", "Independent", "None", and "Other". We validate the pre-screener within survey 1. Recruitment began on April 15, 2024 with the

[33]See Peer et al. (2022) for a discussion of data quality from Prolific.

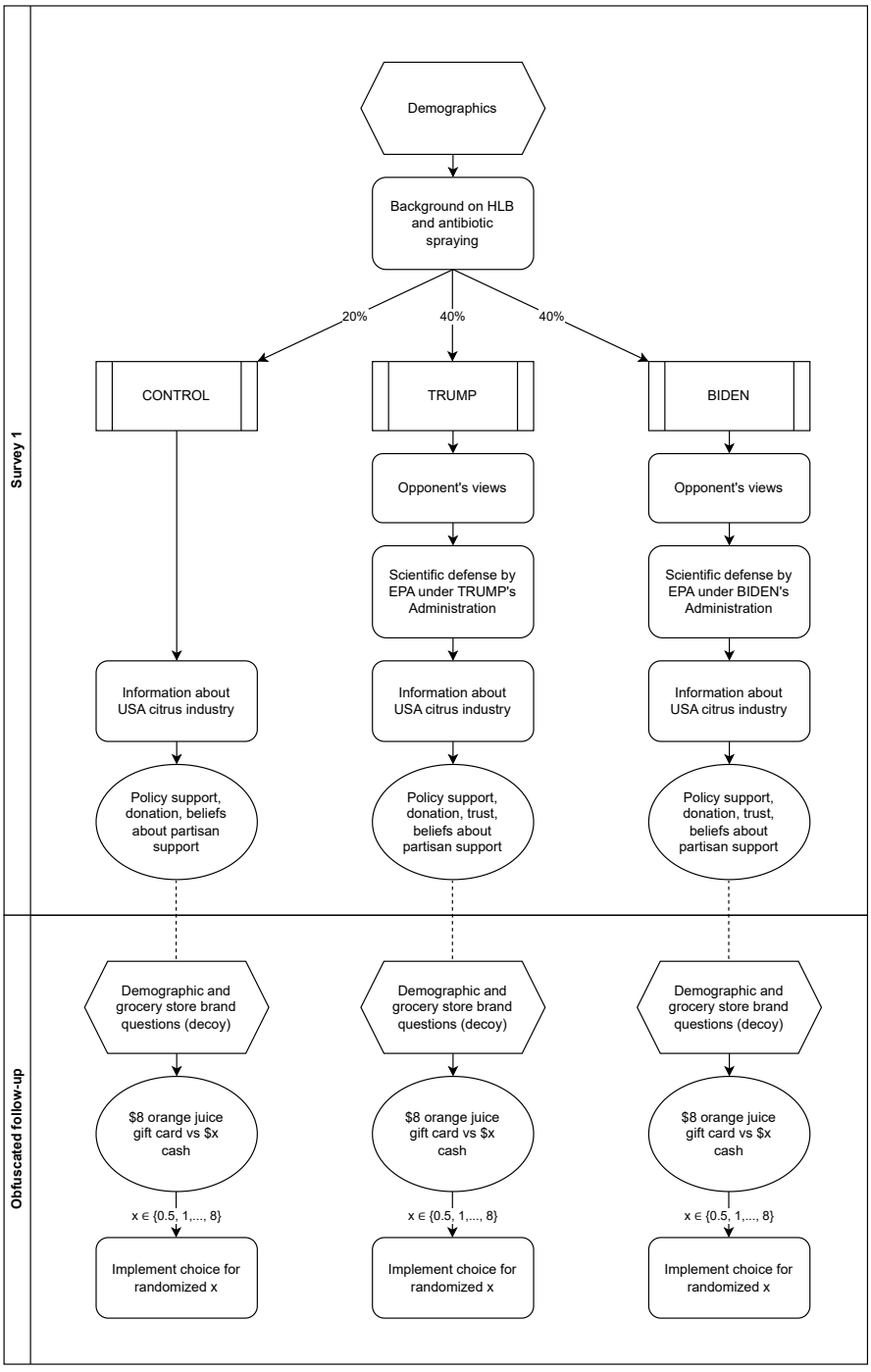


Figure 3: Study Flow

Notes: The figure provides an overview of the study flow. It shows the order of information blocks (rounded rectangles), outcome questions (ovals), and demographic and decoy questions (hexagons). It indicates that, following background information on HLB and the policy, participants are randomly assigned to one of three experiment conditions: Control, Biden, and Trump. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence during the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. The figure also shows the division between the two surveys with obfuscation taking place between them, indicated by dotted lines.

first respondents taking survey 1 on this day. In order to achieve our pre-registered target sample size of 5,470, recruitment continued for one month, with the final participant taking survey 1 on May 15, 2024.

We elected to conduct the study with a sample of Democrats rather than Republicans for three reasons. First, Democrats are much more readily available on Prolific. According to our power calculation, we needed about 5,500 individuals to complete survey 1 to achieve the desired minimum detectable effect (approximately 0.09–0.10 SD) for our main outcome. Recruiting that many Republican participants on Prolific would have been difficult. Second, prior literature suggests that Democrats and Republicans are likely to respond to information interventions in asymmetric ways (e.g., Kashner and Stalinski, 2024). Thus, using a pooled sample of both groups is not best practice. Lastly, we conjectured that Republicans, who tend to exhibit more communal rather than universalist moral values (Enke, 2020), may rely even more on partisan loyalty when deciding what to trust. Therefore, we expected that the effects for Democrats might represent lower bounds for the effects among Republicans.

3.1.2 Study Flow

Survey 1 was conducted online using Qualtrics. Following the consent procedure, participants answered a series of demographics questions. Among these questions there was an attention check. Respondents who failed this check were excluded from the remainder of the survey.

Background Subsequently, we introduced ourselves as non-partisan researchers interested in public policy issues. We then provided a brief introduction to the issue of citrus greening disease. Specifically, we explained the effects of the disease on the Florida citrus industry, and that large quantities of streptomycin, a medically useful antibiotic, had been sprayed on citrus trees in the United States. We ensured that the respondents understood this information by asking several comprehension questions.

Group assignment We then randomly allocated the participants into one of three groups. These groups are Control (20% of sample), Biden (40%) and Trump (40%). When assigning groups, we stratified the sample on whether they ever consume orange juice or not,[34] to reduce imbalances on this dimension.

[34]Specifically, we classify a participant as a 'never-consumer' of orange juice if they answer "Never" when asked how often in the past month did they (i) buy orange juice, and (ii) consume orange juice, and if thirdly they select "Orange juice" when asked "In general, are there any of these products that you never consume?" We then stratify on whether respondents are classified as never-consumers vs sometimes-consumers.

Arguments against spraying For the two treatment groups (Trump and Biden), we provided additional information about the arguments against the use of streptomycin spraying on citrus crops. We did this to minimise experimenter demand which might arise if we only provided the arguments supporting the spraying. Specifically, we explained that streptomycin is not permitted on crops in the European Union and Brazil; that agricultural use of antibiotics may contribute to the prevalence of antibiotic-resistant pathogens; and that direct exposure to antibiotics may affect an individual's health.

Treatment screen 1 The Trump and Biden groups were then shown two screens which provided further information about the EPA's introduction of, and justification for, the spraying. On the first screen, respondents in the Trump group were told that the decision to authorise streptomycin spraying "was supported by the administration of President Donald Trump" and that "the EPA under the administration of President Donald Trump" provided scientific evidence that the risks of the policy met the required standards. For the Biden group, "Donald Trump" was replaced by "Joe Biden". Respondents were also informed about a legal challenge to the policy and that (despite the challenge) streptomycin spraying was permitted to continue as of December 2023. Apart from the two passages above, the body of the text was identical between the Trump and Biden groups.

Treatment screen 2 The second treatment screen contained text that was again identical between the two groups. It provided five statements "backed by scientists from the EPA in favour of streptomycin spraying". These points contained quotes from the EPA's respondent's brief from the legal challenge (in turn referring to statements made in the EPA's report supporting the decision to allow streptomycin spraying) stating that there were no risks of concern to human health and the environment, and that it is unlikely that agricultural use of streptomycin has caused any of the existing streptomycin resistance in clinical settings.

Cross-randomisation The treatment screens were accompanied by a captioned photo of the respective president. We cross-randomised whether this was their official White House portrait, or a photo of them shaking hands with their corresponding Administrator of the EPA. While the latter is a more realistic representation of what might accompany information in the real world (e.g., in a news article), it also makes salient other differences between the administrations beyond the party and president, such as the demographic composition of the administration. Cross-randomising allows us to determine whether this drives the results.

We also cross-randomised whether the EPA is mentioned explicitly, or is instead referred to as "the relevant regulatory agency". We do this to address concerns that the EPA may be perceived as being at the extreme of politicised governmental agencies. Anonymising the EPA allows us to see if the treatment effect differs when respondents can only infer the identity of the agency based on the information.[35]

Final information screen Prior to the outcomes section, all groups (including the Control group) were given information about citrus production in the United States. The information was provided alongside a map highlighting California, Arizona, Texas and Florida, the states which account for almost all commercial citrus production in the country.

3.1.3 Sample size and balance

A total of 5,566 individuals passed our initial attention check and were assigned a treatment group. Of these, 5,496 (98.7%) completed the information provision sections and the targeted 5,470 (98.3%) completed all outcome questions. Overall, we had 1,103 out of 1,111 (99.3%) assigned to the Control group complete all questions; 2,180 out of 2,223 (98.1%) assigned to the Biden group completed all questions; and 2,187 out of 2,232 (98.0%) assigned to the Trump group completed all questions. For each outcome discussed below, we use the full sample of individuals that answered the associated questions, even if they did not complete all other outcome questions.

In the online appendix, we present the balance on covariates across the three experimental groups. We report that for the included variables there are no differences between the three groups at the 5% significance level, and only two out of fifteen that are marginally significant at the 10% significance level (the proportion of female respondents and the proportion that have completed a four year college degree).

To validate the pre-screener question used in recruitment, we asked respondents the extent of their agreement with the statements (i) "I support the Democratic Party for Congress", and (ii) "I will vote for Donald Trump if he is on the ticket in the 2024 presidential elections." They were asked to provide their agreement on a scale from 0 to 100, with 0 indicating "Strongly disagree" and 100 indicating "Strongly agree". The results suggest that the sample is strongly Democrat, with the average Congressional support equal to 87.5 out of 100, and the average

[35] Other agencies that respondents might infer as the relevant agency include the United States Department of Agriculture and the Food and Drug Administration.

support for Trump equal to 5.2 out of 100.

3.1.4 Outcomes

The final section of the survey asked questions relating to the outcomes of interest. We pre-registered two primary outcomes for survey 1. The first is the proportion of a bonus payment donated to United States Public Interest Research Group (USPIRG). All participants were offered a bonus of \$1.00, of which they could donate a portion (from \$0 to \$1 in increments of \$0.01) to USPIRG. On this screen, we described USPIRG as a non-partisan, non-profit organisation that has been advocating for public health, safety and well-being for 40 years. We stated that USPIRG "advocates against streptomycin spraying on citrus crops" since they were a co-petitioner in the legal challenge to the policy. This makes clear to respondents that the donation is not simply a campaign donation that ends up in partisan hands, but rather indicates their desire to outlaw the spraying via supporting an NGO at real economic cost to themselves.

The second primary outcome from survey 1 is a policy support index based on agreement with the following four statements about the authorisation to spray streptomycin on citrus crops: (i) "The policy is safe as it is endorsed by the relevant government agency," (ii) "The policy has negative consequences on people's health," (iii) "I think that antibiotic spraying of citrus crops should be outlawed," and (iv) "I support the policy as it helps protect the economy with no major risks involved."[36] Answers were provided on a scale from 0 ("Strongly disagree") to 100 ("Strongly agree"). We constructed the index by first standardising the scores within each statement, and multiplying by -1 for statements that indicate disagreement with the regulation. The index is the sum of these four standardised, sign-adjusted scores. The order in which these two primary outcome questions were displayed was cross-randomised.[37]

We also pre-registered three secondary outcomes for survey 1. The first outcome was a trust index, constructed in the same way as the policy index but using the following four statements: (i) "I trust the EPA which determined that the policy is safe," (ii) "The arguments provided by the opponents of the policy were convincing.", (iii) "The scientific evaluation conducted by the EPA was thorough and I trust it," and (iv) "The opponents of the policy are scaremongering." Recall that whether the EPA was explicitly named or was instead replaced by "the relevant regulatory agency" was randomised. Second, we asked respondents

[36] The statements were shown in a randomised order, along with an attention check question.

[37] Specifically, we randomised the order of the donation question on the one hand, and a block containing two screens—first the regulation support questions and second the trust questions (described below).

what percentage of Republicans, and of Democrats, support the spraying of citrus crops. We incentivised this question by offering a bonus of $0.25 per question if their answer was within 3 percentage points of the "true value" which we took from prior pilot surveys. Third, for a subsample of respondents (15%), we asked a question on planned consumption of citrus products in the upcoming month. Specifically, we asked the likelihood that they purchase orange- or citrus-based products, on a scale from 0 ("Very unlikely") to 100 ("Very likely"). We also asked this subsample the extent to which their answer to the planned consumption question was affected by concerns about the direct health consequences of consuming citrus or contributing to antibiotic resistance (internality vs externality).

3.2 Survey 2

3.2.1 Recruitment

For survey 2, we used Prolific to recruit individuals who took survey 1, completed all the information and treatment screens, and who at least sometimes consume orange juice.[38] This left us with a pool of 4,581 respondents. Eligible respondents were first invited to take survey 2 on the third day after the day they took survey 1, so that the first responses to survey 2 were collected on April 18, 2024. The invitation remained open for 15 days, hence no responses were collected after June 1.

3.2.2 Sample size and balance

Out of the 4,581 eligible respondents, ultimately 4,025 (87.9%) started survey 2, with 4,000 (87.3%) completing the primary outcome questions. By treatment group, we had 820 out of 925 (88.6%) eligible from the Control group complete the outcome questions; 1,577 out of 1,822 (86.6%) for the Biden group; and 1,603 out of 1,834 (87.4%) for the Trump group. The differences in attrition rates between the three groups are not statistically significant (p=0.280). In the online appendix, we report the balance of covariates between treatment groups among those who started survey 2. We observe no evidence of imbalance among those who took up survey 2 at the 5% significance level. Only one is significant at the 10% level ($\geq$ 4 Years College).

[38] We exclude never-consumers to avoid floor effects, which would make downward treatment effects in WTP difficult to measure when the initial level of WTP is close to 0. The classification of never-consumers is the same as we use to stratify the treatment group allocation. This sample restriction was pre-registered.

3.2.3 Study flow

Much of the design of survey 2 is focused on achieving obfuscation so that treatment groups are not differentially affected by experimenter demand. Beginning from the advertisement that appeared on Prolific to recruit participants to the study, survey 2 was framed as a grocery store marketing survey, with a casual and engaging tone, and used the University of Florida (UF) logo.[39] The Qualtrics URL that appeared while respondents take survey 2 maintained the UF association, beginning with "https://uffred.qualtrics.com...". By comparison, survey 1 was labelled as a public policy issues survey, was more formal and fact-oriented, and the URL was associated with the University of Warwick (UW): "https://warwick.co1.qualtrics.com...". In survey 2, we used a UF Institutional Review Board consent form, while in survey 1 we used the equivalent from UW. At all stages, and in particular in the consent forms, we took steps to ensure that we remain truthful, and that only the essential information was omitted.

In addition to distinguishing the institution associated with the research, we took measures within the body of survey 2 to obfuscate its association with survey 1. First, despite collecting demographics in survey 1, we again asked basic demographic questions in survey 2, as respondents would expect to see. This involved asking some questions again (e.g., age) but in different ways (10 year bands c.f. exact age in years), and asking additional questions that might be relevant to a grocery store marketing survey. For instance, we asked about entertainment and news media consumption, where respondents are likely exposed to advertising. We then asked a series of decoy questions about preferred brands, advertisement recall, and brand recognition. There were 8 decoy questions in total, with up to 5 sub-questions each. Amongst these was an additional attention check question.

3.2.4 WTP outcome

The primary pre-registered outcome of survey 2 is the respondent's WTP for an $8 product-specific digital gift card for orange juice. We told respondents that the gift cards were for purchases from Amazon.com, valid for 12 months, and would be provided via a link immediately (if they are to receive one). We emphasised that they would not need to share any PIIs (such as email address) with us, and that it could be applied directly to their Amazon account. We informed respondents that the gift cards could only be used on the selected type of product. To maintain obfuscation, we informed respondents that the specific product was

[39] All study materials, including those featuring the University of Florida's logo, were submitted to the University of Florida Institutional Review Board, which granted approval for the study.

randomly drawn from the products in the previous section. Specifically, it was Tropicana orange juice with probability 0.99 and Pantene shampoo with probability 0.01, but respondents were not informed of these probabilities. We also told participants that, in the event that the specific product is not available, similar products can be purchased (in the case of orange juice, they will have a selection of other citrus-based juices and drinks). The exact list of products made available through the gift card is controlled by the researcher, with eligible products specified by their Amazon Standard Identification Number (ASIN).

To elicit the WTP for the gift card, we used a multiple price list (MPL) approach, which involved many binary comparisons between the gift card and a varying cash bonus (to be paid through Prolific). Prior to these binary comparisons, we told respondents that after answering the series of questions, a cash value from $\{0.50, 1.00, ..., 8.00\}$ would be randomly selected with equal probability. If their answers indicated that they prefer the gift card, they would receive the gift card, otherwise they would receive the randomly drawn cash amount. We implemented a basic algorithm that allowed us to determine the participant's WTP to a level of precision of \$0.50 within four to five questions.[40] When respondents have a WTP over \$7.50, we asked them for the specific cash bonus that would make them equally happy as receiving the gift card. If their value is below \$0.50, we asked if they prefer \$0 or the gift card, however this last question is not incentivised, since they will never be offered a cash bonus of \$0. The final outcome variable codes the WTP as the midpoint of the 0.5-wide interval, or their exact reported valuation if over \$7.50, capped at \$8. We checked that respondents understood the essential aspects of the gift card and the multiple price list task using comprehension questions.

3.3 Sample Representativeness

Our target population for recruitment was self-identifying Democrats. While we were able to filter participants on this dimension, our resulting sample was not necessarily representative of the broader population of Democrats. Table 2 compares key demographics for the sample of participants who completed survey 1 with values representative of the population of Democrats, taken from the American Trends Panel Wave 117 (Pew Research Center).

To account for the differences, we also present our main results using sample reweighting

[40] In doing so, we assume monotonicity in the underlying preferences, i.e., if they prefer \$$x$ to the gift card, then they also prefer \$$y > x$ to the gift card. We also assume their WTP is non-negative since there is free disposal.

Table 2: Sample Representativeness

	Sample	Pew
Age	40.322	46.868
Black	0.190	0.214
White	0.664	0.595
Asian	0.114	0.067
Hispanic	0.091	0.195
Female	0.604	0.575
High School	0.995	0.935
Four Year Degree	0.618	0.407

Notes: The table presents the means of demographic variables for the sample of participants who were assigned a treatment group, and with representative values calculated from the Pew Research Center's American Trends Panel, Wave 177 (2022). We report the following covariates in order: (1) age, in years (*Age*), (2) a dummy equal to one if they are black/African American (*Black*), (3) a dummy equal to one if they are white/European American (*White*), (4) a dummy equal to one if they are Asian/Asian American (*Asian*), (5) a dummy equal to one if they are Hispanic or Latino (*Hispanic*), (6) a dummy equal to one if a person is female and zero otherwise (*Female*), (7) a dummy equal to one if a person has completed high school (*High School*), (8) a dummy equal to one if they have completed a 4 year degree or a post-graduate degree ($\geq$ *4 Years College*).

as a robustness check in the online appendix. Specifically, we generated weights using raking (proportional fitting) to match the representative marginal distributions on key demographic categories,[41] after dropping individuals who did not complete survey 1. This provided a single representative sample for all survey 1 questions except for planned consumption, which was only shown to a subset of respondents. For this outcome, we repeated the process among that subset.[42]

For the follow-up survey, our target population was self-identifying Democrats who consume orange juice at least sometimes. To generate appropriate weights, we calculated representative marginal distributions for demographics from our own sample of orange juice consumers using the previously calculated weights.

4 Results

Sections 4.1 and 4.2 discuss the results of the experiment outlined in Section 3, focusing on outcomes from survey 1 and survey 2 respectively. Section 4.3 describes additional heterogeneity analysis. Lastly, Section 4.4 provides supporting results and robustness checks. Figure 4 summarises the results for the main outcomes across both surveys.

[41] Specifically: age categories (18–29, 30–49, 50–64, 65+ as available in the American Trends Panel data), gender (male, female, non-binary/other), race/ethnicity (White, Black, Asian, Hispanic) and education (completed high school, completed 4 year college degree or more).

[42] Note: we omitted the high school completion dimension due to lack of observations in this subsample.

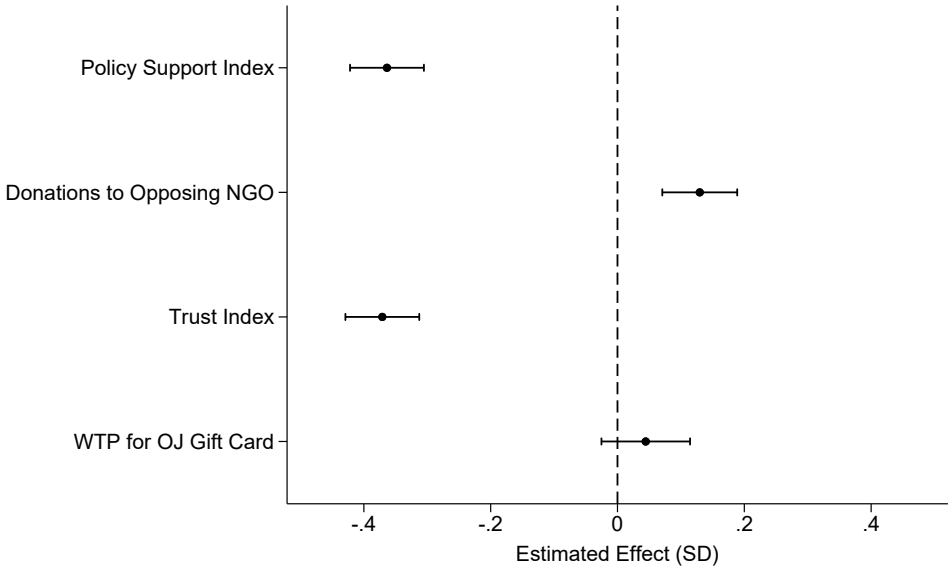


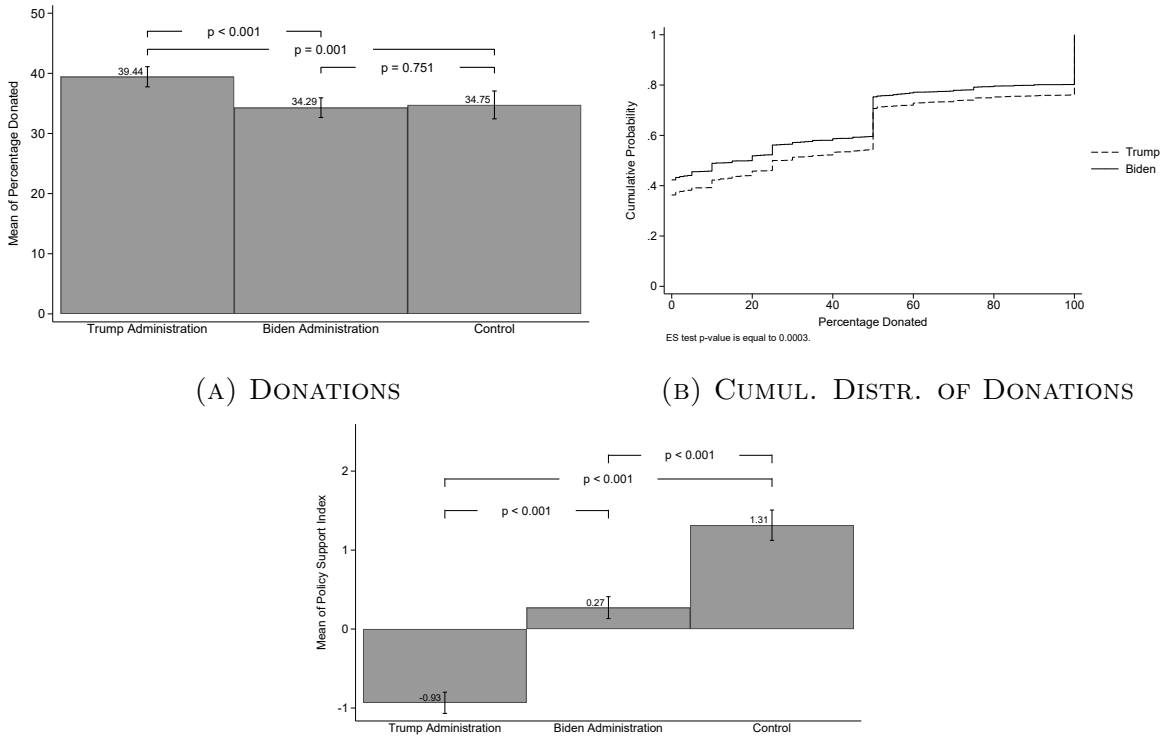
FIGURE 4: SUMMARY OF TREATMENT EFFECTS: TRUMP VS BIDEN

Notes: The figure presents the regression results for each of the four main outcomes (policy support index, donations, trust index and WTP for an orange juice gift card), restricting the sample to those assigned to either the Trump or Biden groups. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump. We first standardise the outcome values by dividing by their respective standard deviations, using only the Trump and Biden groups (pooled) to calculate the standard deviation. We then regress each standardised outcome on a dummy equal to one if they were assigned to the Trump group. We then plot the point estimates and 95% confidence intervals for the coefficient on the Trump group dummy. Confidence intervals are calculated using robust standard errors.

4.1 Survey 1 Main Results

4.1.1 Donation Outcome

We report in Figure 5a that, for the group that was provided information of the EPA's support of streptomycin spraying under Trump's administration, the proportion of the bonuses donated to USPIRG, an organisation that opposes the policy of streptomycin spraying on citrus crops, was 39.44%. For the group informed about the EPA's support while under Biden's administration, this was 34.29%. The difference when provided information regarding oversight by Trump (the out-group president for Democrats) relative to Biden, while holding the scientific rationale of the policy constant, was 5.14 pp ($p<0.001$), or 0.13 SD. This is equivalent to a relative increase of 15.0% in the proportion of the bonus donated to USPIRG. Since the bonus from which participants could donate was equal to \$1, this is equal to an average increase of 5.14 cents. Given that this is an incentivised outcome, the results indicate that participants are willing to give up real economic resources to oppose the policy when the agency's scientific defence comes during an out-group administration compared to an in-group administration, even though the content of that defence is identical.



(A) Donations

(B) Cumul. Distr. of Donations

(C) Policy Support Index

Figure 5: Main Outcomes from Survey 1 by Treatment Group

Notes: Panel A depicts mean percentage of the bonus payment donated to United States Public Interest Research Group (USPIRG), an organisation that opposes the streptomycin spraying policy, by treatment group. We also present the 95% confidence intervals for the means. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. We report the p-values for pairwise regressions of the proportion of the bonus payment donated to USPIRG on a dummy equal to one if a person was assigned to one treatment group instead of the other. In all cases, p-values were computed using robust standard errors. **Panel B** depicts the empirical cumulative distribution functions of the percentage of the bonus payment donated to USPIRG for the Trump and Biden groups. We report the p-value for the Epps–Singleton characteristic function test of equality of two distributions (denoted ES). **Panel C** depicts the mean policy support index, calculated as the sum of the sign-adjusted standardised scores to four policy support questions, by treatment group. We also present the 95% confidence intervals for the means. We report the p-values for pairwise regressions of the policy support index on a dummy equal to one if a person was assigned to one treatment group instead of the other. In all cases, p-values were computed using robust standard errors. The figure is based on a sample of N=5,492 individuals who completed the donation task (1,107 for Control, 2,188 for Biden and 2,197 for Trump), and a sample of N=5,489 who completed the policy support questions (1,107 for Control, 2,187 for Biden and 2,195 for Trump). The order in which the donation and policy questions appeared for respondents was cross-randomised with equal probability.

Further, Figure 5b shows the empirical distributions of donations for the Trump and Biden groups. We observe that the empirical distribution of donations for the Trump group dominates that of the Biden group in the first-order sense. The difference in the distributions is statistically significant (p=0.0003) according to the Epps-Singleton characteristic function test (Goerg and Kaiser, 2009).

We find no evidence of an effect of perceived in-group oversight (combined with discussion of opposition arguments) relative to the Control for donations (p=0.751).

Panel A of Table 3 reports results from regression analysis for treatment effects on the donation outcome, using pairwise group comparisons as well as pooling all three groups. Columns (5)–(8) show that the estimates are largely unchanged in magnitude and significance when adding controls.

4.1.2 Policy Support Outcome

For the Trump group, the average of the policy support index was -0.934, while for the Biden group, it was 0.272. This equates to a difference of -1.21 ($p<0.001$), or -0.36 SD. This result reinforces that Democrats form very different positions on a science-based policy when learning that the scientific evidence was provided during the out-group administration instead of the in-group administration, even when it is the same evidence coming from the same regulatory agency. Panel B of Table 3 shows the associated regression results. Again, the magnitude and significance of the estimates are robust to controlling for age, sex and strata fixed effects.

The policy support index is generated from the answers to four individual questions. Figure 6 reports the coefficients for the Trump treatment relative to the Biden treatment for each of these component questions. Note that the outcome values have been normalised to have mean 0 and standard deviation 1, but have not had their signs adjusted. For each question, those in the Trump group express less support for the policy on average compared to the Biden group. The component-wise estimates are all similar in magnitude, suggesting no particular question is driving the overall index result.

Using the question "I think that antibiotic spraying of citrus crops should be outlawed" specifically, we can quantify the change in support for the policy by taking an answer below 50 to mean they support the policy (i.e., they do not agree that it should be outlawed). We find that 28.62% of those in the Biden group support the spraying, while for the Trump group it is only 21.09%. That is, out-group oversight results in a 26.31% decrease in the level of support for the regulation relative to in-group oversight.

Table 3: Treatment Effects on Main Survey 1 Outcomes

	(1) vs Control	(2) vs Control	(3) vs Biden	(4) vs Control	(5) vs Control	(6) vs Control	(7) vs Biden	(8) vs Control
Panel A: Donations								
Trump	4.682***		5.141***	4.682***	5.653***		5.128***	5.646***
	(1.458)		(1.194)	(1.458)	(1.406)		(1.150)	(1.403)
Biden		-0.459		-0.459		0.468		0.535
		(1.446)		(1.445)		(1.399)		(1.397)
Constant	34.75***	34.75***	34.29***	34.75***	6.718**	6.909**	7.132**	6.711**
	(1.181)	(1.181)	(0.834)	(1.181)	(3.255)	(3.330)	(2.841)	(2.666)
Observations	3304	3295	4385	5492	3304	3295	4385	5492
Controls	No	No	No	No	Yes	Yes	Yes	Yes
p-value (Treatment)	0.0013	0.7508	< 0.0001	-	< 0.0001	0.7381	< 0.0001	-
Mean dep. var.	37.867	34.449	36.870	36.443	37.867	34.449	36.870	36.443
SD dep. var.	39.887	39.088	39.628	39.567	39.887	39.088	39.628	39.567
Panel B: Policy Support Index								
Trump	-2.249***		-1.205***	-2.249***	-2.262***		-1.205***	-2.257***
	(0.120)		(0.0985)	(0.120)	(0.116)		(0.0947)	(0.116)
Biden		-1.043***		-1.043***		-1.055***		-1.053***
		(0.121)		(0.121)		(0.119)		(0.119)
Constant	1.315***	1.315***	0.272***	1.315***	2.882***	1.931***	1.430***	2.437***
	(0.0979)	(0.0979)	(0.0707)	(0.0979)	(0.268)	(0.285)	(0.232)	(0.222)
Observations	3302	3294	4382	5489	3302	3294	4382	5489
Controls	No	No	No	No	Yes	Yes	Yes	Yes
p-value (Treatment)	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	< 0.0001	-
Mean dep. var.	-0.180	0.622	-0.332	-0.000	-0.180	0.622	-0.332	-0.000
SD dep. var.	3.400	3.325	3.316	3.369	3.400	3.325	3.316	3.369

Notes: The table reports pairwise treatment effects for the main outcomes of survey 1. There are three treatment groups: Control, Biden and Trump. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. **Panel A** provides results with the percentage of the bonus payment donated to United States Public Interest Research Group (USPIRG) as the dependent variable. For each column, the comparison (base) group is indicated directly under the column number. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group, and limit the sample to those in either the Trump or Control groups. For column (2) this is repeated but with Biden instead of Trump. In column (3) we limit the sample to those assigned to the Trump or Biden groups. In column (4), we pool all three groups and include both Trump and Biden group dummies. Columns (5)–(8) present the same specifications as (1)–(4) but with the addition of controls. The following controls were included: age, number of adults (over 18) in the household capped at 10, number of children in the household capped at 10, a measure of a person's relative importance of universalist vs communal values based on an abridged Moral Foundations Questionnaire and calculated according to Enke (2020), fixed effects for gender categories (male, female, non-binary, other and refused answer), a dummy equal to one if they are white/European American, a dummy equal to one if they are black/African American, a dummy equal to one if they are Hispanic or Latino, a dummy equal to one if they are Asian/Asian American, a dummy equal to one if a person has not undertaken at least some college study, a dummy equal to one if they have completed a 4 year degree or a post-graduate degree, a dummy equal to one if they have a religion or belief, and strata fixed effects. **Panel B** reports the same specifications as Panel A but the dependent variable is the policy support index. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

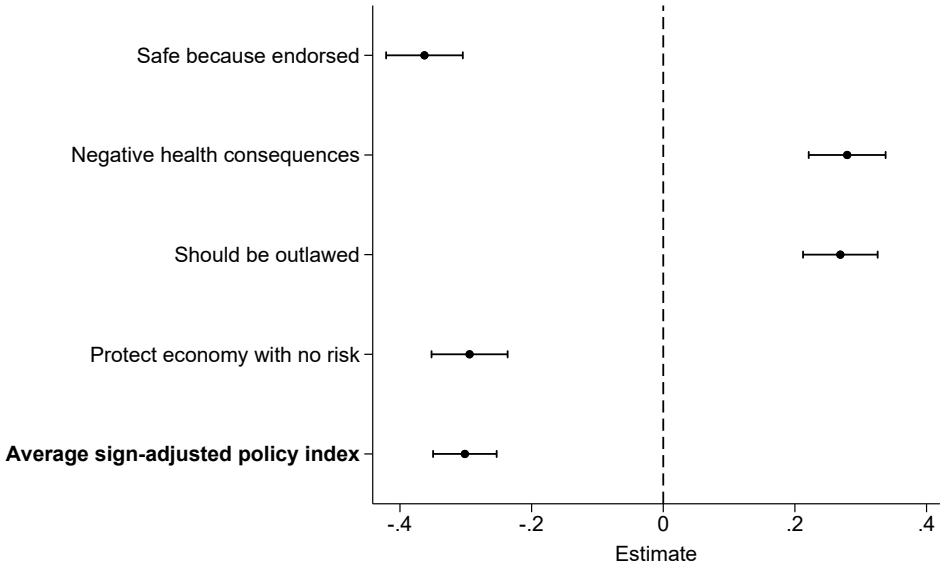


FIGURE 6: TREATMENT EFFECTS ON POLICY INDEX COMPONENTS: TRUMP VS BIDEN

Notes: The figure presents the regression results for each component of the policy support index, restricting our sample to those assigned to either the Trump or Biden groups. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump. The Control group were not asked the trust questions. We regress the standardised score for each component on a dummy equal to one if they were assigned to the Trump group. For Average sign-adjusted policy index, we take the policy index as defined in the text and divide by 4 so that the scale is comparable to the individual components. We then plot the point estimate and 95% confidence intervals for the coefficient on the Trump group dummy.

In contrast to the donation outcome, we also find that learning about the EPA's support under Biden's administration (along with arguments in opposition to the policy) has a net negative effect on support relative to the Control ($p<0.001$).

4.1.3 Trust

In addition to the above results on regulation support, Table 4 summarises the results on trust in the EPA's evaluation for the Trump and Biden groups. The average value of the trust index for the Trump group was -0.55, while for the Biden group it was 0.56. The difference is -1.11 ($p<0.001$), equivalent to -0.37 SD. This finding provides a strong motivation for our channel of interest—the perception of out-group partisan oversight of the civil service reduces trust in expert regulators. The result is robust to including controls.

It is helpful to consider two mechanisms through which political polarisation can affect trust in regulatory agencies. First, people may perceive an agency as less competent during an out-group administration, for example, due to political appointments that are more common in polarised environments (i.e., political capture of nominally meritocratic agencies). The second mechanism is partisan bias, which implies lower trust in officials associated with the

Table 4: Treatment Effects on the Trust Index

	(1) Trust	(2) Trust
Trump	-1.108***	-1.111***
	(0.0888)	(0.0847)
Constant	0.555***	1.774***
	(0.0637)	(0.207)
Observations	4380	4380
Controls	No	Yes
p-value (Treatment)	< 0.0001	< 0.0001
Mean dep. var.	0.0000	0.0000
SD dep. var.	2.9888	2.9888

Notes: The table reports regression results with the trust index as the dependent variable. The sample is restricted to those who were assigned to either the Trump or Biden groups. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump. The Control group were not asked the trust questions. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group. column (2) presents the same specification as column (1) but with the addition of controls. The following controls were included: age, number of adults (over 18) in the household capped at 10, number of children in the household capped at 10, a measure of a person's relative importance of universalist vs communal values based on an abridged Moral Foundations Questionnaire and calculated according to Enke (2020), fixed effects for gender categories (male, female, non-binary, other and refused answer), a dummy equal to one if they are white/European American, a dummy equal to one if they are black/African American, a dummy equal to one if they are Hispanic or Latino, a dummy equal to one if they are Asian/Asian American, a dummy equal to one if a person has not undertaken at least some college study, a dummy equal to one if they have completed a 4 year degree or a post-graduate degree, a dummy equal to one if they have a religion or belief, and strata fixed effects. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

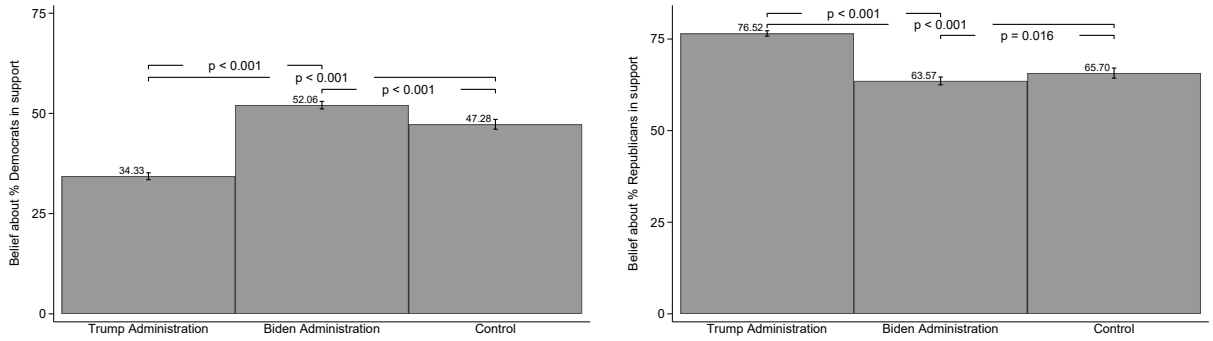
out-party regardless of their perceived competence. Our experiment offers suggestive evidence on these mechanisms by cross-randomising the photographs accompanying the EPA's scientific arguments. Participants either saw a portrait of the president or a photo of the president shaking hands with their appointed head of the EPA. The latter made the president's influence over agency appointments particularly salient. We detect no heterogeneity in treatment effects on regulation support, the trust index, or USPIRG donations by photo type (Table 8). This provides suggestive evidence that the salience of presidential influence over agency personnel, which may affect perceived competence, is not the dominant mechanism.

Taking together the results on regulation support, trust, and NGO donations, we document risks associated with both rising affective polarisation, manifesting as distrust towards out-party institutions and experts, and further politicisation of the civil service in light of the likely roll-back of Pendleton Act protections and stronger scrutiny by the OMB over agency spending. Expert agencies regulate key markets, including food and medicine, and the consequences of partisan opposition to vital regulation in these areas can have long-lasting welfare

consequences, especially in healthcare contexts. All of these considerations impact the debate on the optimal design of regulatory agencies within the system of government. High costs of perceived politicisation of the agencies in the current polarised environment tilts the balance between their accountability and independence in favour of more independence.

4.1.4 Other Secondary Outcomes

We also analyse a number of other secondary outcomes elicited in survey 1. First, we report significant treatment effects on the beliefs that participants hold about Republican and Democrat support for the antibiotic spraying, where accuracy of beliefs was incentivised. Figure 7 presents the results. The respondents anticipate support to be higher for in-group partisans (with respect to the administration in power when the EPA supported the scientific analysis) and lower for out-group partisans. Specifically, the Biden group believes that 52% of Democrats support the policy on average, while the Trump group believes just 34% of Democrats support the spraying—they expect other Democrats to share their negative response to the regulation. Similarly, respondents in the Trump group believe 77% of Republicans support the spraying, while the estimate is 64% for the Biden group. Together, this shows a strong perception among respondents that support for expert regulations is polarised by perceived partisan oversight.



(A) Beliefs about Democrats (B) Beliefs about Republicans

Figure 7: Beliefs about Partisan Policy Support by Treatment Group

Notes: Panel A the mean response when asked what percentage of Republicans support "the policy of spraying citrus crops with antibiotics in order to fight citrus greening", by treatment group. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. We report the p-values for pairwise regressions of the reported belief on a dummy equal to one if a person was assigned to one treatment group instead of the other. In all cases, p-values were computed using robust standard errors. **Panel B** is the same as Panel A, except respondents were asked what percentage of Democrats support the policy. The figure is based on a sample of N=5,492 individuals who completed the beliefs questions (1,106 for Control, 2,184 for Biden and 2,192 for Trump).

We also asked a random subsample of 15% of participants about their plans to consume

citrus in the following month. We report no significant difference between the Trump and Biden groups (p=0.386), while the reported probability of consumption for the Control group was significantly higher than both Trump and Biden groups by 7.13 (p=0.034) and 9.54 (p=0.005) respectively. Table 5 provides further regression results with the magnitudes of treatment vs Control effects remaining consistent in direction after controlling for covariates. The null difference between Biden and Trump groups remains across specifications. While these results should be interpreted cautiously due to the reduced power in our subsample, they suggest that the reduction in trust generated by out-group (vs in-group) oversight of the EPA may not translate into changes in demand, even though making health concerns salient does have a significant negative effect on the consumption plan. The latter finding showcases that there is room for finding the impact of distrust due to perceived partisan oversight of regulatory agencies on product demand.

Table 5: Treatment Effects on Planned Consumption

	(1) vs Control	(2) vs Control	(3) vs Biden	(4) vs Control	(5) vs Control	(6) vs Control	(7) vs Biden	(8) vs Control
Trump	-7.128**		2.410	-7.128**	-4.750		3.607	-4.921
	(3.356)		(2.777)	(3.356)	(3.146)		(2.438)	(3.118)
Biden		-9.538***		-9.538***		-8.397***		-8.578***
		(3.395)		(3.394)		(3.236)		(3.187)
Constant	53.00***	53.00***	43.46***	53.00***	48.22***	45.06***	40.27***	47.34***
	(2.745)	(2.745)	(1.997)	(2.744)	(7.520)	(7.858)	(6.005)	(6.043)
Observations	491	502	651	822	491	501	649	822
Controls	No	No	No	No	Yes	Yes	Yes	Yes
p-value (Treatment)	0.0342	0.0052	0.3859	-	0.1318	0.0098	0.1395	-
Mean dep. var.	48.354	46.711	44.647	46.384	48.354	46.685	44.626	46.384
SD dep. var.	35.151	36.439	35.450	35.689	35.151	36.471	35.454	35.689

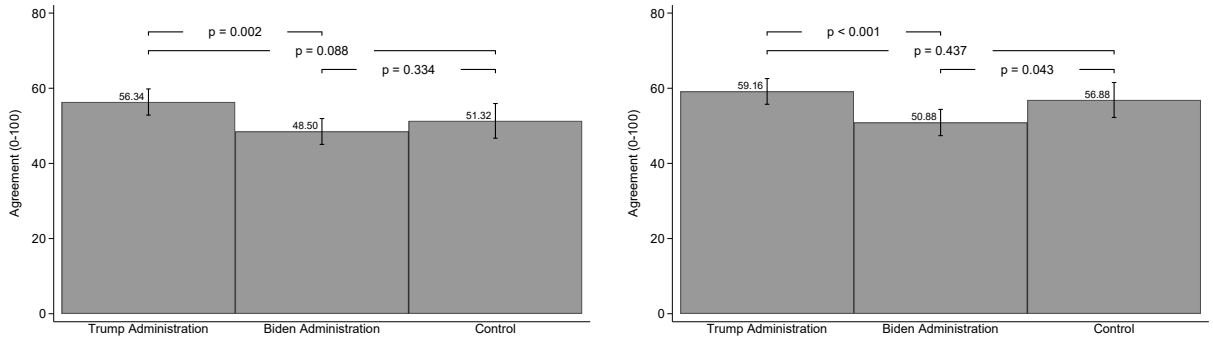
Notes: The table reports the regression results with the reported likelihood of consuming citrus products in the next month (from 0 to 100) as the dependent variable. There are three treatment groups: Control, Biden and Trump. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. For each column, the comparison (base) group is indicated directly under the column number. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group, and limit the sample to those in either the Trump or Control groups. For column (2) this is repeated but with Biden instead of Trump. In column (3) we limit the sample to those assigned to the Trump or Biden groups. In column (4), we pool all three groups and include both Trump and Biden group dummies. Columns (5)–(8) present the same specifications as (1)–(4) but with the addition of controls. The following controls were included: age, number of adults (over 18) in the household capped at 10, number of children in the household capped at 10, a measure of a person's relative importance of universalist vs communal values based on an abridged Moral Foundations Questionnaire and calculated according to Enke (2020), fixed effects for gender categories (male, female, non-binary, other and refused answer), a dummy equal to one if they are white/European American, a dummy equal to one if they are black/African American, a dummy equal to one if they are Hispanic or Latino, a dummy equal to one if they are Asian/Asian American, a dummy equal to one if a person has not undertaken at least some college study, a dummy equal to one if they have completed a 4 year degree or a post-graduate degree, a dummy equal to one if they have a religion or belief, and strata fixed effects. Robust standard errors are in parentheses. Reported p-values are for two-sided tests. * significant at 10%; ** significant at 5%; *** significant at 1%.

Interestingly, when asked about factors driving their consumption plan, a Trump-Biden split re-emerges (see Figure 8). We asked the same subsample of respondents the extent to which they agree with the statements "I am concerned about the health effects of directly consuming citrus products" and "I am concerned about contributing to antibiotic resistance in bacteria" when considering whether to consume citrus, on a scale of 0 ("Strongly disagree") to 100 ("Strongly agree"). Those in the Trump treatment group claim to be more concerned about both their own health with mean agreement 7.84 points higher than for the Biden group (p=0.002) and also more concerned about contributing to antibiotic resistance by 8.28 points (p<0.001).[43] This effect is easily detected with the smaller subsample. The results suggest that while respondents may not be inclined to actually change their demand for citrus, they ex-post rationalise their planned consumption differently, showing differential awareness of the risks. This is in line with the overall pattern of results that we find—distrust has real impacts but may not translate into market demand.

4.2 Follow-up Survey Main Results

In Table 6, we report the mean willingness to pay (WTP) for a digital Amazon gift card that could only be redeemed for citrus juice products like orange juice, by treatment group. Despite being powered to detect effects as small as 0.09-0.1 SD, we find no significant overall effect of out-group presidential administration on the WTP for the gift card, whether comparing to in-group oversight (p=0.211) or the Control group (p=0.545). However, we do find evidence of heterogeneity along the (pre-registered) dimension of baseline consumption of orange juice, with more negative effects for those with lower baseline consumption. This heterogeneity is particularly strong among those who took the follow-up soon after the first survey. We discuss these results in more detail below.

[43]The court proceedings and limited media coverage on the issue focused primarily on the environmental risks of antibiotic application, such as microbial resistance and risks to pollinators, rather than on direct risks to consumers. This, however, did not affect the experimental environment, as survey responses indicate that participants were ex ante largely unfamiliar with citrus greening or the related regulations. Consequently, the opponents' arguments presented in the survey, which mentioned both microbial resistance and direct risks to consumers in equal measure, were the participants' main source of information. It is important to note that even in the absence of perceived direct risks to consumers, our experiment can still address the question of how partisanship affects consumption behaviour. This is because consumer utility may also depend on externalities to the health of others. Lusk et al. (2006) corroborate this point by providing empirical evidence that consumers favour restrictions on antibiotic use in pork production due to both direct health risks and externalities such as increased antibiotic resistance.



(A) Concerned for own health (B) Antibiotic resistance

Figure 8: Factors Affecting Planned Consumption by Treatment Group

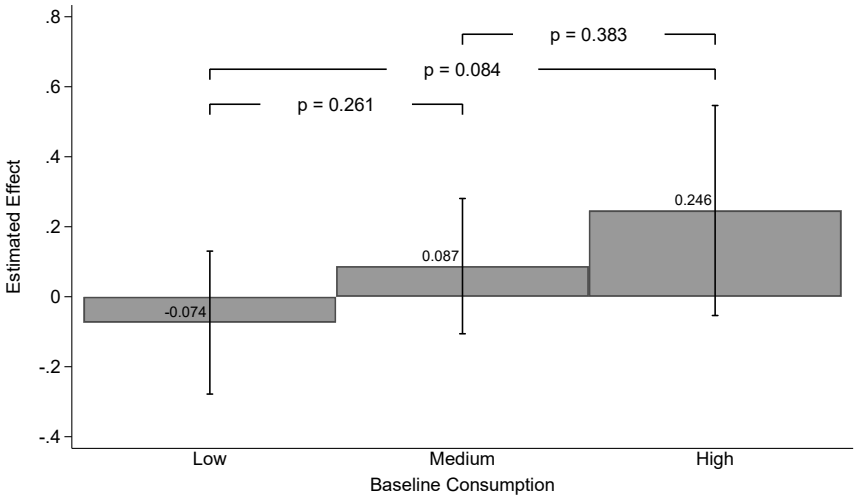
Notes: The figures depict the mean agreement with the following two statements on a scale of 0 to 100, by treatment group: (a) "I am concerned about the health effects of directly consuming citrus products.", and (b) "I am concerned about contributing to antibiotic resistance in bacteria.". There are three treatment groups: Control, Biden and Trump. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. We also present the 95% confidence intervals for the means. We report the p-values for pairwise regressions of the reported likelihood of consumption on a dummy equal to one if a person was assigned to one treatment group instead of the other. In all cases, p-values were computed using robust standard errors. The figures are based on a randomly selected 15% subsample of N=822 individuals who were selected to see the question (171 for Control, 331 for Biden, and 320 for Trump).

4.2.1 Willingness to Pay

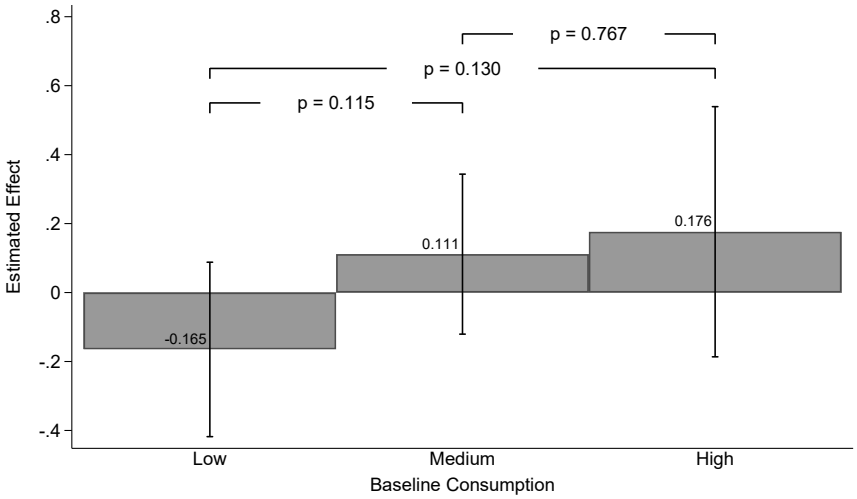
We find no evidence of an overall effect of out-group presidential oversight of the EPA when it defended the antibiotic spraying policy on the WTP for citrus products. Specifically, Table 6 shows that the average WTP for an $8 Amazon gift card for orange juice is $1.69 for the Trump group, $1.61 for the Biden group, and $1.64 for the Control group. Although the Trump group is the highest, the mean is not statistically different from the Biden (p=0.211) or Control (p=0.545) groups. The 95% confidence interval for the Trump vs Biden effect excludes negative effects larger than 4.7 cents. Similar to the donations outcome, there is no net effect of in-group presidential administration plus opposition arguments compared to the Control (p=0.663). The null effects are robust to including covariates (columns (5)–(8)).

Anticipating that habitual consumers may be less likely to change their demand in response to our intervention, we pre-registered to test heterogeneity of the WTP with respect to baseline consumption of orange juice. Among those who answered the WTP questions, 31.75% were low consumers, 43.67% were medium consumers, and 24.58% were high consumers.[44] Figure 9 presents the net treatment effect of out-group presidential administration on the WTP

[44]Following the pre-registration, participants who indicated in survey 1 that they never consume orange juice (overall and in the past month) were excluded from the follow-up survey. For participants who took the follow-up survey, we classified those who did not consume orange juice in the past month as *low* consumers, those who answered "Once or twice a month" or "Once a week" were categorised as *medium*, and those who answered "A few times a week" or "Every day" were categorised as *high*.



(A) Trump vs Biden



(B) Trump vs Control

Figure 9: Trump Treatment Effect on WTP by Baseline Consumption

Notes: Panel A The figure presents treatment effects of the Trump treatment relative to the Biden treatment, by baseline orange juice consumption. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. We regressed the WTP for the gift card on a dummy equal to one if the individual was assigned to the Trump group, which was interacted with an indicator variable for the baseline consumption category. The sample was limited to those assigned to either the Trump group or the Biden group. We then graph the estimated marginal effect of the Trump treatment (relative to Biden) at each of the three baseline consumption groups, with 95% confidence intervals. We also report p-values for pairwise tests for differences in treatment effects between baseline consumption categories. In all cases, p-values were computed using robust standard errors. **Panel B** The figure presents the same information as Panel A, except the comparison treatment group is Control instead of Biden.

Table 6: Treatment Effects on WTP for an Orange Juice Gift Card

	(1) vs Control	(2) vs Control	(3) vs Biden	(4) vs Control	(5) vs Control	(6) vs Control	(7) vs Biden	(8) vs Control
Trump	0.0486		0.0832	0.0486	0.0437		0.0783	0.0401
	(0.0804)		(0.0665)	(0.0804)	(0.0802)		(0.0660)	(0.0800)
Biden		-0.0346		-0.0346		-0.0372		-0.0371
		(0.0792)		(0.0792)		(0.0783)		(0.0783)
Constant	1.642***	1.642***	1.607***	1.642***	0.746***	0.686***	0.696***	0.723***
	(0.0645)	(0.0645)	(0.0461)	(0.0645)	(0.186)	(0.183)	(0.162)	(0.151)
Observations	2400	2372	3146	3959	2400	2372	3146	3959
Controls	No	No	No	No	Yes	Yes	Yes	Yes
p-value (Treatment)	0.5454	0.6629	0.2113	-	0.5858	0.6345	0.2351	-
Mean dep. var.	1.674	1.619	1.649	1.647	1.674	1.619	1.649	1.647
SD dep. var.	1.888	1.825	1.867	1.861	1.888	1.825	1.867	1.861

Notes: The table reports the regression results with the willingness to pay for an $8 orange juice gift card as the dependent variable. There are three treatment groups: Control, Biden and Trump. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. For each column, the comparison (base) group is indicated directly under the column number. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group, and limit the sample to those in either the Trump or Control groups. For column (2) this is repeated but with Biden instead of Trump. In column (3) we limit the sample to those assigned to the Trump or Biden groups. In column (4), we pool all three groups and include both Trump and Biden dummies. Columns (5)–(8) present the same specifications as (1)–(4) but with the addition of controls. The following controls were included: age, number of adults (over 18) in the household capped at 10, number of children in the household capped at 10, a measure of a person's relative importance of universalist vs communal values based on an abridged Moral Foundations Questionnaire and calculated according to Enke (2020), fixed effects for gender categories (male, female, non-binary, other and refused answer), a dummy equal to one if they are white/European American, a dummy equal to one if they are black/African American, a dummy equal to one if they are Hispanic or Latino, a dummy equal to one if they are Asian/Asian American, a dummy equal to one if a person has not undertaken at least some college study, a dummy equal to one if they have completed a 4 year degree or a post-graduate degree, and a dummy equal to one if they have a religion or belief. Robust standard errors are in parentheses. Reported p-values are for two-sided tests. * significant at 10%; ** significant at 5%; *** significant at 1%.

relative to the Biden treatment (9a) and the Control (9b) by consumption bin. Associated regression results are reported in Table 7. We do not find significant treatment effects within consumption bins, however, the effect of out-group oversight on WTP for occasional consumers is significantly different than for frequent consumers by $0.32 (p=0.084). This result is robust to controlling for a number of covariates (column (4) of Table 7). Medium consumers place roughly in between the high and low level consumers, although the difference relative to occasional consumers is not statistically significant (p=0.261). Pooling medium and high consumers together also results in statistically significant heterogeneous effects compared with the low consumers (column (6) of Table 7). While it is useful to look at this pooled comparison, we caution the reader that this particular comparison was not pre-registered. Figure 9b demonstrates a similar pattern when comparing the effect of the Trump treatment to the Control. However, we do not detect significant pair-wise heterogeneity across the consumption

bins except when we pool medium and high consumers compared to the low consumption group (Table 7).

Table 7: Treatment Effects on WTP by Baseline Consumption

	(1) vs Control	(2) vs Biden	(3) vs Control	(4) vs Biden	(5) vs Control	(6) vs Biden	(7) vs Control	(8) vs Biden
Trump	-0.165	-0.0740	-0.156	-0.0746	0.138	0.147*	0.127	0.141*
	(0.129)	(0.104)	(0.129)	(0.104)	(0.101)	(0.0839)	(0.100)	(0.0833)
Trump × Medium	0.276	0.161	0.259	0.158				
	(0.175)	(0.143)	(0.174)	(0.143)				
Trump × High	0.341	0.320*	0.314	0.312*				
	(0.226)	(0.185)	(0.225)	(0.184)				
Trump × Low					-0.303*	-0.221*	-0.282*	-0.217
					(0.164)	(0.134)	(0.163)	(0.133)
Observations	2400	3146	2400	3146	2400	3146	2400	3146
Controls	No	No	Yes	Yes	No	No	Yes	Yes
Base Group	Low	Low	Low	Low	Med.+High	Med.+High	Med.+High	Med.+High
Mean dep. var.	1.674	1.649	1.674	1.649	1.674	1.649	1.674	1.649
SD dep. var.	1.888	1.867	1.888	1.867	1.888	1.867	1.888	1.867

Notes: The table reports pairwise treatment effects for the WTP outcome by baseline consumption. There are three treatment groups: Control, Biden and Trump. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. For each column, the comparison group is indicated directly under the column number. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group interacted with the baseline consumption indicator variable, and limit the sample to those in either the Trump or Control groups. For column (2) this is repeated but with Biden as the comparison group instead of Control. Columns (3)–(4) present the same specifications as (1)–(2), except with the addition of controls. The following controls were included: age, number of adults (over 18) in the household capped at 10, number of children in the household capped at 10, a measure of a person's relative importance of universalist vs communal values based on an abridged Moral Foundations Questionnaire and calculated according to Enke (2020), fixed effects for gender categories (male, female, non-binary, other and refused answer), a dummy equal to one if they are white/European American, a dummy equal to one if they are black/African American, a dummy equal to one if they are Hispanic or Latino, a dummy equal to one if they are Asian/Asian American, a dummy equal to one if a person has not undertaken at least some college study, a dummy equal to one if they have completed a 4 year degree or a post-graduate degree, and a dummy equal to one if they have a religion or belief. Columns (5)–(8) use the same specifications as (1)–(4), except instead of using an indicator for three baseline consumption groups, we use a dummy equal to one if the individual had low baseline consumption and interact this with the Trump group dummy. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Taken together, our heterogeneity results indicate that the information intervention is sufficiently strong to impact demand—as people with different past consumption react *differentially* to treatment—suggesting that the overall null result is not simply due to insufficient strength of the intervention. This is in line with our expectations, as the existing evidence suggests that people are very responsive to concerns about food safety, particularly marginal consumers (e.g., Lusk et al., 2006; Dahlhausen et al., 2018). We note, however, that conceptually the net effect of the treatments on frequent consumers' demand does not necessarily have to be weaker than for marginal consumers. While several factors may decrease their willingness to substitute away from orange juice based on an information signal, including

habit formation and status-quo bias, higher exposure to perceived health risks is a possible counter-force.

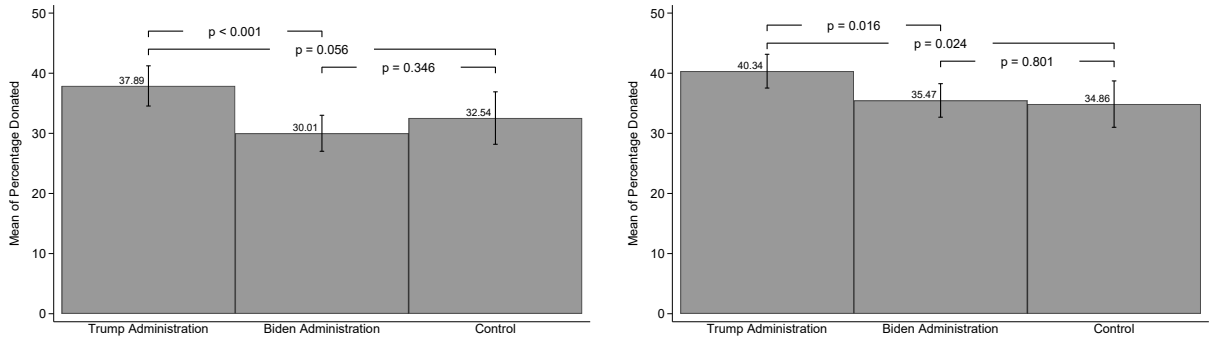
In the online appendix, we present the treatment effects by baseline consumption, restricting the sample to those who took the follow-up on the first possible day (3 days after survey 1). This accounts for 63% of people who took the follow-up. This subset is of interest because the information from survey 1 is most fresh in their minds. This group is also of interest as there was a risk that following the first survey, participants may have purchased orange juice due to its salience, thus dampening their demand in the follow-up. While we endeavoured to address this by making participants aware that the Amazon voucher was valid for 12 months, rather than being required to be used immediately, the early-uptake subset are least likely to have been affected by this since they had less opportunity to purchase orange juice. We report that for this subset of respondents, the out-group vs in-group effect remains heterogeneous between frequent and occasional consumers (p=0.027). Likewise, in comparison to the Control group, we report a corresponding result with the difference in the net effect for frequent and occasional consumers significant at the 10% level (p=0.082). Note that we do not formally test whether this subgroup exhibits *differential* heterogeneity by baseline consumption but rather test for heterogeneity within this subgroup, given our limited power and the fact that this would be a triple interaction term.

4.3 Additional Heterogeneity Analysis

4.3.1 Effects on Donations and Trust by Baseline Consumption

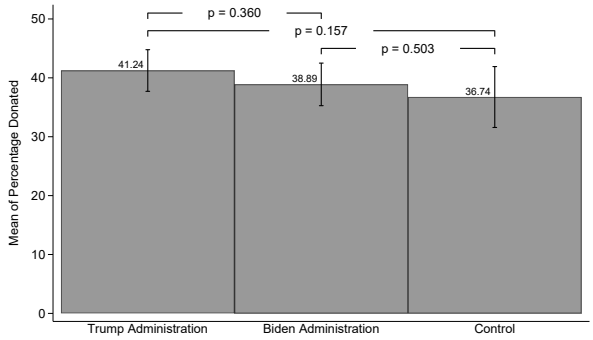
In addition to the heterogeneity of the WTP by baseline consumption discussed above, we also explore treatment effects by past consumption for (1) our other economic decision outcome (NGO donations) and (2) trust in the EPA's evaluation.

Figure 10 presents the mean donations to USPIRG by treatment group, separately for each level of baseline consumption (excluding the never-consumers who were not invited to the follow-up due to their zero demand for citrus products). For the low consumption bin, out-group partisan oversight leads to a 7.9 pp increase in the share of the bonus donated by respondents compared to in-group partisan oversight (p<0.001). This large increase of 26% indicates that occasional consumers are very responsive to perceived out-group oversight when making other economic decisions related to the regulation. Within the medium baseline consumer group, the effect is 4.9 pp or a relative magnitude of 13.7%; within high consumers, it is just 2.4 pp or a relative magnitude of 6%. The result may appear surprising, as frequent



(A) Low

(B) Medium



(C) High

Figure 10: Donation Treatment Effects by Baseline Consumption

Notes: Panel A: The figure depicts mean percentage of the bonus payment donated to United States Public Interest Research Group (USPIRG), an organisation that opposes the streptomycin spraying policy, by treatment group. The sample is restricted to those who were sometimes consumers and had low baseline consumption of orange juice. We also present the 95% confidence intervals for the means. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. We report the p-values for pairwise regressions of the proportion of the bonus payment donated to USPIRG on a dummy equal to one if a person was assigned to one treatment group instead of the other. In all cases, p-values were computed using robust standard errors. **Panel B:** The figure presents the same information as Panel A, except for medium baseline consumers instead of low. **Panel C:** The figure presents the same information as Panel A, except for high baseline consumers instead of low.

consumers have a stronger material interest in stopping a policy that increases the health and environmental risks associated with consumption. One possible explanation is cognitive dissonance (Akerlof and Dickens, 1982), whereby frequent consumers avoid taking an action that would highlight inconsistency with their consumption habits. Importantly, this does not imply that they trust the EPA's evaluation more or that they are more supportive of the regulation.

In fact, we do not observe a similar heterogeneity trend in the point estimates for the impact of out-group (vs in-group) partisan oversight on trust in the EPA by baseline consumption. In the online appendix, we present the mean of the trust index by treatment group and by baseline consumption level. We demonstrate that the effect is statistically significant but of similar

Table 8: Main Heterogeneity in Trump vs Biden Treatment Effects

	(1) Donations	(2) Policy Index	(3) Trust Index	(4) WTP
Trump × Male	-6.948***	0.239	0.113	0.168
	(2.389)	(0.204)	(0.183)	(0.135)
Trump × Universalist	0.0661	-0.481**	-0.594***	-0.175
	(2.407)	(0.195)	(0.175)	(0.133)
Trump × EPA	1.886	0.310	0.156	0.0127
	(2.389)	(0.197)	(0.178)	(0.133)
Trump × Portraits	2.497	-0.0461	-0.0460	-0.228*
	(2.389)	(0.197)	(0.178)	(0.133)
Trump × Never Consumer	-0.925	-0.150	-0.161	
	(3.239)	(0.257)	(0.233)	
Baseline Consumption				
Trump × Medium	-1.670	0.195	0.0938	0.161
	(2.709)	(0.216)	(0.196)	(0.143)
Trump × High	-4.182	-0.267	-0.0510	0.320*
	(3.144)	(0.274)	(0.240)	(0.185)
Observations	4385	4382	4380	3146
Mean dep. var.	36.870	-0.332	0.000	1.649
SD dep. var.	39.628	3.316	2.989	1.867

Notes: The table presents the heterogeneity regression results for the primary outcomes of the surveys. All regressions are restricted to the sample of those assigned to either the Trump or Biden groups. For each cell, we regress the dependent variable on a Trump group dummy interacted with the dimension of heterogeneity without any further controls, and report the coefficient of the interaction term. We report heterogeneity along the following variables: (1) a dummy equal to one if the person is male and zero otherwise (*Male*), a dummy equal to one if the person has a relative universalism score above the median of the sample (*Universalist*), a dummy equal to one if the person was assigned to see "EPA" and zero if they saw "relevant regulatory agency" (*EPA*), a dummy equal to one if the person was assigned to see presidential portraits and zero if they saw the photo of the president with their EPA Administrator (*Portraits*), and a dummy equal to one if they answered "Never" when asked how often in the past month did they (i) buy orange juice, and (ii) consume orange juice, and if thirdly they select "Orange juice" when asked "In general, are there any of these products that you never consume?" (*Never Consumer*). For baseline consumption, we interacted the Trump group dummy with the medium and high consumption group dummies within the same regression. The dependent variable is listed immediately under the column number. The WTP heterogeneity by Never Consumer is omitted as never-consumers were not invited to the follow-up. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

magnitude for each consumption bin. To reinforce this, Table 8 reports the interaction terms of the primary outcomes (including trust) along several different dimensions of heterogeneity, including baseline consumption of orange juice. Column (3) of Table 8 shows that there are no statistically significant differences in the effect across consumption bins. Thus, our channel of trust in the EPA appears similarly active irrespective of frequency of orange juice

consumption, despite the fact that economic decisions (the WTP for orange juice), exhibit heterogeneity in this dimension.

4.3.2 Heterogeneity by Strength of Partisanship

We explore heterogeneity in treatment effects by partisanship strength. To measure partisanship strength, we create an index based on the likelihood of supporting Democrats for Congress (0–100 scale) and the sign-adjusted likelihood of voting for Donald Trump in 2024 (also 0–100). Table 9 reports the results. We find significant heterogeneity in treatment effects on support for the regulation, trust in the EPA's evaluation, and USPIRG donations—each showing more pronounced effects among stronger Democratic partisans. In particular, in the context of USPIRG donations, strong Democrats allocate a higher share of the bonus payment to an NGO that opposes the use of antibiotics on citrus crops in response to the Trump treatment (relative to the Biden treatment). We do not find evidence that treatment effects on WTP for orange juice vary by partisanship strength, consistent with other factors (such as baseline consumption levels) being stronger predictors. In the online appendix, we show that our heterogeneity results are robust to alternative measures of partisanship strength.

Table 9: Heterogeneity by Strength of Partisanship: Trump vs Biden

	(1) Donations	(2) Policy Index	(3) Trust Index	(4) WTP
Trump	5.153***	-1.177***	-1.071***	0.0945
	(1.195)	(0.0978)	(0.0876)	(0.0669)
Partisanship Index	-1.102**	0.0812**	0.0387	-0.0391
	(0.472)	(0.0405)	(0.0355)	(0.0254)
Trump × Partisanship Index	2.467***	-0.526***	-0.518***	-0.0284
	(0.673)	(0.0621)	(0.0518)	(0.0443)
Observations	4372	4372	4372	3135
Mean dep. var.	36.820	-0.328	0.005	1.649
SD dep. var.	39.612	3.316	2.987	1.868

Notes: The table presents the heterogeneity results by strength of partisanship for the four main outcomes. All regressions are restricted to the sample of those assigned to either the Trump or Biden groups. In column (1) we regress USPIRG donations on a Trump treatment dummy interacted with a partisanship index based on the respondent's agreement with supporting the Democratic Party for Congress (0-100) and agreement with voting for Donald Trump in 2024 (0-100). The index is constructed by standardising the values of responses to each question, multiplying the second score by -1 and adding the scores together. In column (2), we repeat this using the policy support index as the dependent variable. In column (3) we use the trust index as the dependent variable. In column (4) we use the WTP outcome as the dependent variable. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

4.3.3 Heterogeneity by Baseline Trust in Regulatory Agencies

We conducted a separate experiment on Prolific to examine heterogeneity in treatment effects by baseline trust in regulatory agencies, including the EPA. A total of 1,072 individuals were randomly assigned to one of four groups: Trump (33.5%), Biden (33.2%), Control (16.7%), or Pure Control (16.6%). Of these, 1,050 (98%) completed the survey, matching the pre-registered sample size. All respondents completed a demographics section including a question measuring trust in five regulatory agencies (EPA, FDA, Federal Reserve, National Park Service, and CDC) on a four-point scale: very low (1), somewhat low (2), somewhat high (3), and very high (4). Survey instructions and information interventions for the Trump, Biden, and Control groups were nearly identical to those in the original study, with minor updates reflecting changes in the practice and legal context of antibiotic use on citrus crops (details in the online appendix).[45] We elicited three outcomes: support for the regulation, trust in the EPA's evaluation, and planned consumption of citrus products next month (unlike in the original experiment, all participants answered the consumption question). We analyse heterogeneity by baseline trust in the EPA and by an index of baseline trust, defined as the sum of trust scores across agencies, focusing on above- vs below-median splits for each outcome.

Table 10 presents the results. First, we replicate the significant treatment effects from the original study across the three outcomes. Information indicating that the regulation was issued during an out-group presidential administration reduces support for the regulation by 0.53 SD and trust in the agency's evaluation by 0.55 SD. Relative to the control group, it decreases support for the regulation by 1 SD and planned citrus consumption by 0.37 SD. We also find a new negative effect of the out-group administration versus the in-group on planned consumption (–0.23 SD), which was not detected in the original study.

Second, Table 10 shows significant heterogeneity in treatment effects on planned consumption by baseline trust in the EPA. The interaction coefficients are nearly identical in magnitude to the effects for low-trust individuals, indicating that the treatment effects are driven almost entirely by respondents with low baseline EPA trust. Heterogeneity by general trust in regulatory agencies points in the same direction, with stronger effects among those with lower baseline trust. We find no evidence of heterogeneity in treatment effects for regulation support or trust in the agency's evaluation. However, for consumption decisions, which are typically more resistant to change because they involve established habits, partisan signals are effective

[45] The Pure Control group completed only the demographics section. We did not elicit outcomes for that group in survey 1. The purpose of the Pure Control group is discussed in Section 4.4.2.

Table 10: Heterogeneity in Treatment Effects by Baseline Trust in Agencies

	(1) Planned Consumption	(2) Planned Consumption	(3) Planned Consumption	(4) Policy Index	(5) Policy Index	(6) Policy Index	(7) Trust Index	(8) Trust Index	(9) Trust Index
Panel A: Trump vs Biden									
Trump	-7.855***	-10.22***	-13.44***	-1.738***	-1.892***	-1.985***	-1.620***	-1.631***	-1.691***
	(2.585)	(2.915)	(3.183)	(0.239)	(0.261)	(0.288)	(0.213)	(0.238)	(0.264)
Trump × High Baseline EPA Trust		10.41*			0.711			0.126	
		(6.265)			(0.613)			(0.523)	
Trump × High Baseline General Trust			13.89***			0.576			0.130
			(5.345)			(0.499)			(0.440)
Observations	698	698	698	699	699	699	698	698	698
Mean dep. var.	40.877	40.877	40.877	-0.528	-0.528	-0.528	0.000	0.000	0.000
SD dep. var.	34.332	34.332	34.332	3.273	3.273	3.273	2.923	2.923	2.923
Panel B: Trump vs Control									
Trump	-12.73***	-16.33***	-16.11***	-3.489***	-3.596***	-3.443***			
	(3.162)	(3.548)	(3.992)	(0.287)	(0.317)	(0.361)			
Trump × High Baseline EPA Trust		15.05*			0.546				
		(7.695)			(0.719)				
Trump × High Baseline General Trust			8.392			-0.0373			
			(6.467)			(0.587)			
Observations	528	528	528	528	528	528			
Mean dep. var.	41.227	41.227	41.227	-0.228	-0.228	-0.228			
SD dep. var.	34.296	34.296	34.296	3.504	3.504	3.504			

Notes: The table presents heterogeneity results by baseline trust in agencies for three outcomes: planned consumption, policy support index, and the trust index. In **Panel A**, the regressions are restricted to the sample of those assigned either the Trump or Biden groups. In column (1) we regress planned consumption on a Trump dummy only. In column (2), we interact the Trump dummy with a dummy equal to 1 if the respondent reports a higher than median level of trust in the EPA at baseline based on a four-point scale. In column (3), we repeat this with a dummy equal to 1 if the respondent reports a higher than median level of trust in a collection of five agencies (EPA, FDA, Federal Reserve, National Park Service, and CDC), based on the sum of reported trust in each agency on a four-point scale. Columns (4)–(6) repeat these specifications but with the policy index as the dependent variable; columns (7)–(9) use the trust index as the dependent variable. **Panel B** reports the same specifications, but restricting the sample to those assigned either the Trump or Control groups, and excluding columns (7)–(9) since the Control group were not asked the trust index questions. All regressions use the additional study sample data. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

only among individuals with low pre-existing trust levels.

4.3.4 Other Dimensions of Heterogeneity

Table 8 reports additional angles of heterogeneity that we specified in our pre-registration. We find that moral universalism is a descriptive moderator for the treatment effect on regulation support and trust, with more universalist individuals having stronger negative effects of the out-group presidential administration. We also report that gender is a moderator for NGO donations, with higher donations in the Trump group driven mostly by women.

4.4 Robustness

4.4.1 Core Robustness Checks

We consider a number of robustness checks to support the findings from our experiment. First, as discussed in Section 3.2.2, we find no differential attrition both during survey 1 and in between the two surveys. Furthermore, we report no significant imbalances across treatment groups after accounting for dropout between the surveys. Second, in the online appendix, we highlight that our results are substantially robust to reweighting observations to make them representative of the target population, self-identifying Democrats in the US. The weights were generated to match the population's marginal distribution on the key demographic dimensions of age, gender, race and education.

One concern is that the EPA might be perceived as more politicised than other agencies, and hence not be representative of the trust effect that would occur in relation to other agencies. In the survey, we mitigated this by cross-randomising whether the EPA was explicitly mentioned, or instead referred to generically as a regulatory agency. As the context surrounded food, medicines and diseases, the EPA is an unlikely candidate for this generic agency; the Food and Drug Administration or the Centers for Disease Control and Prevention are far more likely candidates to have responsibility. The heterogeneity results in Table 8 indicate no significant differences in treatment effect when mentioning the EPA explicitly, vs referring to it generically as a regulatory agency, for any of our main outcomes.

Moreover, we do not find heterogeneous treatment effects by the type of photo used in the information intervention (president with the EPA's head or president alone) on support for the regulation, trust levels, or NGO donations—the key outcomes for which we report an overall treatment effect.

Another concern is that some participants may think that spraying does not continue at the time they took the survey. This may be particularly important for the Trump group, due to the Trump administration preceding Biden. To address this, we highlighted in the survey text that streptomycin spraying was permitted to continue as of December 2023, which was not long before the survey took place and was considerably beyond the end of the Trump administration. When asked if spraying continues "until this day", almost 90% of respondents answered affirmatively.

4.4.2 Willingness to Pay Results

To address the concern that the null effect on WTP for orange juice might be due to participants no longer remembering the EPA regulation, we invited participants from the supplementary experiment described in Section 4.3.3 to an obfuscated follow-up survey testing their political knowledge.[46] Among multiple decoy questions about Congressional acts and other regulations, we asked about familiarity with the EPA regulation on antibiotic use in citrus crops and under whose presidency it was issued. We also elicited posterior confidence in regulatory agencies, including the EPA and the EPA's evaluation of the specific regulation.

To maintain the highest possible level of obfuscation, the first section of the survey asked about familiarity with various Congressional acts (such as the Affordable Care Act or the Telecommunications Act) and under whose presidency they were enacted. We then turned to regulations issued by federal agencies, with the EPA regulation of interest included among several examples (such as FDA rules on food nutrition labels and FCC rules on equal treatment of internet traffic). When eliciting posterior confidence in agencies, we asked about three agencies (EPA, NASA, USPS), using different wording than in survey 1 ("confidence" rather than "trust") and different scales (0–100 sliders instead of four categories). NASA and USPS were not included in survey 1. The question about confidence in the EPA's scientific analysis before issuing the regulation on antibiotics in citrus crops appeared only at the end, to prevent influencing answers to earlier, better-obfuscated questions.[47]

As in the original experiment, we sent the follow-up invitations three days after survey 1 and invited only participants who at least occasionally consume orange juice. Of the 1,054 individuals who completed the information intervention in the first survey, 891 (84.5%) were eligible for the follow-up survey. A total of 745 of these (83.6%) completed it, with no differential attrition across the four treatment groups (p=0.56). The online appendix shows that the supplementary experiment sample was similar on covariates to that of the original experiment. As noted in Section 4.3.3, one addition to the experimental design relative to the original study was the inclusion of the Pure Control group. Participants in this group completed only the demographics section of survey 1 (including baseline trust questions) but did not receive any information about citrus greening. They serve as a benchmark for assessing the persistence

[46] We used the same obfuscation techniques as in the original experiment, such as using different consent forms mentioning different subsets of the research team and different Qualtrics domains.

[47] For that question, participants evaluated two statements: "I trust the EPA which determined that the policy is safe." and "The scientific evaluation conducted by the EPA was thorough and I trust it." Both statements were among the four trust index statements in survey 1.

of familiarity with the EPA regulation and recall of the treatment information.

We next summarise the results (the relevant tables are in the online appendix). Participants reported high familiarity with the EPA regulation compared with the Pure Control group. Those in the Biden and Trump groups were 32 pp more familiar than Pure Control participants (a 144% increase) and 9 pp more familiar than the Control group (participants learnt about the antibiotic application but not the safety arguments), which is significant at the 1% level. Familiarity did not differ between the Biden and Trump groups, consistent with identical information content aside from the administration name. Participants also accurately recalled which president's administration issued the regulation: Trump-group participants were 44 pp more likely than Pure Control participants ($p<0.01$) and 48 pp more likely than Biden-group participants ($p<0.01$) to identify Trump, while Biden-group participants were 41 pp ($p<0.01$) and 48 pp ($p<0.01$) more likely to identify Biden than the respective comparison groups. Given five response options (George H. W. Bush, Bill Clinton, George W. Bush, Donald Trump, and Joe Biden), these are high accuracy rates. Importantly, very few participants confused the treatment groups; for instance, only 8% of those in the Biden group answered "Trump," even though Trump is the sitting president. Taken together, these findings indicate that participants remembered both the regulation and the treatment information, making it unlikely that the null WTP effect in the original study was driven by participants not remembering the regulation.

Lastly, we find that treatment effects on trust in the EPA's evaluation persisted in the follow-up survey. Exposure to an out-group presidential administration reduced trust by 0.34 SD ($p<0.01$) relative to the in-group administration. This effect remains robust when controlling for baseline trust in the EPA and baseline general trust in regulatory agencies. The posterior trust difference between the Trump group and the Control group is even larger, at 0.64 SD ($p<0.01$). We also observe some spillover effects on overall trust in the EPA as an agency. First, in the regression controlling for baseline general trust, out-group presidential administration reduces trust in the EPA by 0.14 SD ($p=0.07$) relative to the in-group. Using a corresponding specification, out-group presidential administration also reduces trust in the EPA by 0.16 SD ($p=0.08$) against the Control group and by 0.2 SD ($p=0.03$) against the Pure Control group. Overall, treatment-induced trust differences persisted in the follow-up survey, suggesting that the null WTP result in the original study is likely explained by distrust failing

to translate into demand decisions.[48]

5 Conclusion

Independent and executive regulatory agencies constitute a critical yet slightly peculiar element of the system of government. On one hand, their role is to enact regulations based on merit rather than political influence with legislation such as the Pendleton Act strengthening their independence. On the other hand, the agencies face varying degrees of oversight by the partisan executive and legislative branches, which may involve appointments of agency heads by the president and scrutiny over agency spending. These considerations, together with the salience of the president-regulatory agency link in media reporting, might lead to the perception of politicisation of the regulatory agencies.

In this paper, we experimentally explore how political signals (partisanship of the presidential administration) affect trust in agency regulation and explore downstream effects on economic decision-making. Importantly, our context is economically important with large and socially critical markets regulated by the agencies (such as food and medicine). In a preregistered experiment with over 5,000 participants, we exploit an alignment in the way that the EPA during the Trump and Biden administrations defended the safety of spraying citrus crops with antibiotics to randomise the partisanship of the administration, holding the scientific arguments constant. We measure the treatments' impact on support for the regulation, trust in EPA's evaluation, as well as economic outcomes—donations to an NGO opposing the regulation and demand for citrus products. As a result, our paper provides novel evidence on the costs of perceived agency politicisation, contributing to the growing debate on the design of regulatory agencies in the context of the trade-off between their independence and electoral accountability.

Our results contribute to the literature by offering three main lessons. First, we use TV transcript data to document that news channels make the association between presidential administration and expert agencies salient when reporting on regulation. This corroborates the relevance of perceived partisan influence over the agencies as a channel affecting economic decisions. Second, we experimentally demonstrate that having an out-group presidential administration during the time of regulation significantly reduces support for regulation and

[48] Our result that the treatment-induced difference in trust levels persists in the obfuscated follow-up survey is consistent with prior literature. Settele (2022) provides evidence that experimentally induced perceptions strongly persist in obfuscated follow-up surveys conducted even two weeks after the information intervention.

trust in the agency's scientific analysis. This outcome may have disastrous consequences in many contexts, including regulations pertaining to vaccinations, where politicisation may increase vaccine hesitancy. Lastly, our third lesson is that perceived agency politicisation has potential to affect economic outcomes. We demonstrate its impact on non-partisan donation behaviour. However, we offer a caveat—the induced distrust in regulation may not translate into changes in demand for regulated products.

While we do not directly vary political polarisation in our study, our results speak to economic consequences of the phenomenon. Rising affective polarisation exacerbates trust issues in relation to individuals from the out-party. This may extend to experts and scientists employed by agencies associated with the out-party. We support this conjecture by demonstrating negative effects of the out-group administration on trust in science supplied by the EPA at a specific point in time. Given the high cost of perceived politicisation of agencies that we already document, we warn about the consequences of further curtailing agency independence or of a continued rise in affective polarisation, involving higher distrust in individuals associated with the out-party.

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ONLINE APPENDIX

April 1st, 2026

The online appendix provides additional analysis that supports the results presented in the body of the paper (Section A). Moreover, we describe the survey instructions, treatment screens, and the wording of all outcome measures for survey 1 (Section B) and survey 2 (Section C). In Sections D and E we discuss survey materials for the supplementary experiment.

A Additional Analysis

Below, we present auxiliary results that strengthen the robustness and our understanding of the results presented in the body of the paper.

A.1 Sample Balance

To supplement the discussion of our sample, we provide evidence that the sample of individuals assigned treatment in survey 1 is well-balanced. Table A1 shows that the treatment groups did not differ on any of the collected covariates at the 5% level.

As discussed in the paper, we find no differential attrition between survey 1 and survey 2. However, it is still possible that there was differential dropout on the types of individuals if not their numbers. To address this concern, Table A2 shows balance on observable covariates for the sample who took the follow-up survey. We observe no imbalances on any of the 14 available covariates at the 5% level. Only one difference (for $\geq$ 4 Years College) is significant at the 10% level. It is important to note that marginal imbalance (p=0.092) on that characteristic was already present in the sample of people who took survey 1.

A.2 Additional Heterogeneity Analysis

A.2.1 Past Orange Juice Consumption

Below, we present two additional results exploring heterogeneity with respect to past consumption of orange juice (low, medium, or high). First, Figure A1 demonstrates heterogeneity in the WTP for an $8 Amazon gift card for orange juice by past orange juice consumption. Unlike in the paper, here we restrict the sample to those who took the follow-up on the first possible day (3 days after taking survey 1). For these participants, the memory of the information intervention is the most recent. Furthermore, they had less time following the intervention to do grocery shopping and buy orange juice, which could affect their demand for the gift card

during the follow-up survey. As expected, we report an even more pronounced heterogeneity by past consumption for this subsample (of 62.5% of participants). The out-group vs in-group effect for occasional consumers (low consumption bin) was significantly lower than the effect for the high consumers (p=0.027). We observe similar patterns for the Control, with the difference between the low and high consumption bins significant at the 10% level.

Second, Figure A2 looks at treatment effects by past orange juice consumption for a different outcome—trust in EPA's evaluation. We find that for all past consumption bins, out-group presidential administration reduces the trust index (p<0.001). We do not observe large or statistically significant differences in the magnitudes of the treatment effect. Thus, we conclude that heterogeneous treatment effects on the WTP for orange juice are not due to differences in trust effects, but as a result of how distrust translates into economic decision making for frequent vs occasional consumers.

A.2.2 Strength of Partisanship

In the paper, we report that treatment effects on regulation support, trust in the EPA's evaluation, and USPIRG donations are stronger among stronger Democratic partisans, whereas for WTP for orange juice, we detect no heterogeneous treatment effects by partisanship strength. We rely on an index of partisanship strength based on two variables: the likelihood of supporting Democrats for Congress (0–100 scale) and the sign-adjusted likelihood of voting for Donald Trump in 2024 (also 0–100). Table A3 extends these findings by reporting interaction coefficients between the treatment indicator and alternative measures of partisanship strength. Specifically, we present results for each component of the index separately, as well as specifications using indicator variables for above-median responses on both measures and an index combining them. Our original results remain robust across all specifications.

A.3 Robustness: Sample Reweighting

As discussed in the paper, our target population for recruitment was self-identifying Democrats. However, the sample is not necessarily representative of this population. To account for this, we present our main regression specifications but with representative sample weights, as robustness. These weights were generated using raking (proportional fitting) to match the representative marginal distributions of the American Trends Panel Wave 117 on key demographic categories, after first dropping individuals who did not complete survey 1. These demographic categories were: age categories (18–29, 30–49, 50–64, 65+ as available in the American Trends Panel data), gender (male, female, non-binary/other), race/ethnicity (White, Black, Asian, Hispanic) and education (completed high school, completed 4 year college degree or more).

Table A1: Balance on Covariates (Survey 1)

	Full Sample			Control	Biden	Trump	p-value	Pairwise p-values		
Variable	mean	sd	N	mean	mean	mean	Control=Biden=Trump	C=B	C=T	B=T
Age	40.350	13.010	5566	40.977	40.215	40.171	0.207	0.116	0.095	0.910
				(0.399)	(0.277)	(0.271)				
Female	0.606	0.489	5566	0.630	0.592	0.608	0.095	0.031	0.215	0.263
				(0.014)	(0.010)	(0.010)				
White	0.665	0.472	5566	0.661	0.675	0.657	0.419	0.401	0.845	0.204
				(0.014)	(0.010)	(0.010)				
Black	0.190	0.392	5566	0.202	0.187	0.186	0.539	0.321	0.296	0.948
				(0.012)	(0.008)	(0.008)				
Hispanic	0.091	0.288	5566	0.084	0.092	0.093	0.627	0.410	0.359	0.911
				(0.008)	(0.006)	(0.006)				
Asian	0.114	0.318	5566	0.113	0.104	0.124	0.117	0.432	0.365	0.038
				(0.010)	(0.006)	(0.007)				
No College	0.093	0.290	5566	0.088	0.097	0.091	0.666	0.421	0.826	0.477
				(0.009)	(0.006)	(0.006)				
$\geq$ 4 Years College	0.616	0.486	5566	0.640	0.601	0.618	0.092	0.030	0.221	0.249
				(0.014)	(0.010)	(0.010)				
Num Adults in Household	2.185	1.005	5566	2.185	2.204	2.166	0.445	0.618	0.609	0.203
				(0.031)	(0.021)	(0.021)				
Num Children in Household	0.559	0.921	5566	0.539	0.549	0.579	0.416	0.759	0.239	0.286
				(0.027)	(0.019)	(0.020)				
Income $<$ 70k	0.462	0.499	5566	0.443	0.467	0.465	0.370	0.180	0.224	0.876
				(0.015)	(0.011)	(0.011)				
Primary Shopper	0.823	0.382	5566	0.818	0.830	0.819	0.514	0.384	0.979	0.298
				(0.012)	(0.008)	(0.008)				
Religious	0.366	0.482	5566	0.372	0.362	0.368	0.825	0.570	0.845	0.647
				(0.015)	(0.010)	(0.010)				
Universalism Score	7.808	5.018	5566	7.724	7.879	7.780	0.657	0.392	0.758	0.511
				(0.146)	(0.107)	(0.107)				
Never consumes OJ	0.166	0.372	5566	0.166	0.166	0.167	0.997	0.978	0.939	0.952
				(0.011)	(0.008)	(0.008)				

Notes: The table presents balance on covariates by treatment group (Control, Biden and Trump) and for the full sample. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. For each covariate we report the full sample mean, standard deviation and number of observations, and the mean by treatment group with standard errors in parentheses. We also regress each variable on a set of three dummy variables equal to one if the participant was assigned to the Control, or Trump, or Biden treatment group respectively, without a constant term, and report the p-value of the F-test for equality of the three coefficients, as well as pairwise tests with 'C' meaning Control, 'B' meaning Biden, and 'T' meaning Trump. In all cases, p-values were computed using robust standard errors. We report the following covariates in order: (1) age, in years (*Age*), (2) a dummy equal to one if a person is female and zero otherwise (*Female*), (3) a dummy equal to one if they are white/European American (*White*), (4) a dummy equal to one if they are black/African American (*Black*), (5) a dummy equal to one if they are Hispanic or Latino (*Hispanic*), (6) a dummy equal to one if they are Asian/Asian American (*Asian*), (7) a dummy equal to one if a person has not undertaken at least some college study (*No College*), (8) a dummy equal to one if they have completed a 4 year degree or a post-graduate degree ($\geq$ *4 Years College*), (9) the number of adults aged 18 and above in a person's household capped at 10 (*Num Adults in Household*), (10) the number of children under the age of 18 in a person's household capped at 10 (*Num Children in Household*), (11) a dummy equal to one if they have a household income less than \$70,000 (*Income* $<$ *70k*), (12) a dummy equal to one if they are the primary shopper for their household (*Primary Shopper*), (13) a dummy equal to one if they have a religion or belief (*Religious*), (14) a measure of a person's relative importance of universalist vs communal values, from -20 to 20 with more positive values representing more importance for universalist values, based on an abridged eight-question version of the Moral Foundations Questionnaire and calculated according to Enke (2020) (*Universalism Score*), (15) a dummy equal to one if a person never consumed or bought orange juice in the past month and in general never consumes orange juice (*Never consumes OJ*). The table is based on the sample of all individuals assigned to a treatment group (N=5,566).

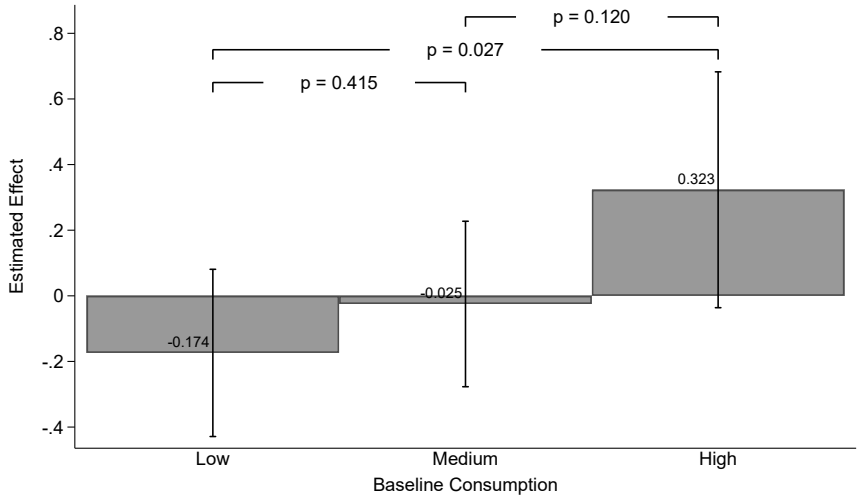
The results are reported in Tables A4 and A5. We see that overall, the results are qualitatively and quantitatively similar to the results without reweighting, and have similar statistical

Table A2: Balance on Covariates (Follow-Up)

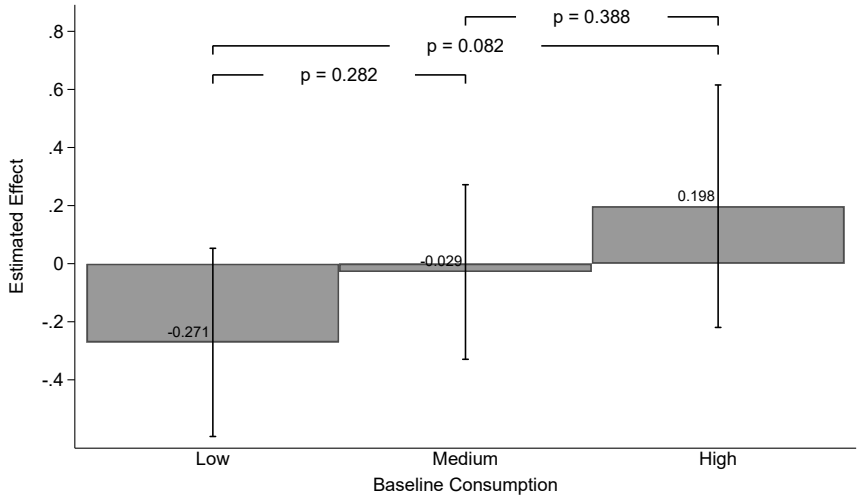
	Full Sample			Control	Biden	Trump	p-value	Pairwise p-values		
Variable	mean	sd	N	mean	mean	mean	Control=Biden=Trump	C=B	C=T	B=T
Age	40.529	12.637	4025	41.062	40.414	40.370	0.405	0.240	0.203	0.920
				(0.448)	(0.320)	(0.309)				
Female	0.604	0.489	4025	0.628	0.592	0.604	0.223	0.083	0.248	0.483
				(0.017)	(0.012)	(0.012)				
White	0.642	0.479	4025	0.631	0.656	0.635	0.336	0.222	0.849	0.209
				(0.017)	(0.012)	(0.012)				
Black	0.208	0.406	4025	0.232	0.203	0.201	0.179	0.102	0.079	0.886
				(0.015)	(0.010)	(0.010)				
Hispanic	0.095	0.293	4025	0.088	0.095	0.099	0.687	0.608	0.387	0.676
				(0.010)	(0.007)	(0.007)				
Asian	0.118	0.322	4025	0.115	0.108	0.128	0.204	0.603	0.343	0.076
				(0.011)	(0.008)	(0.008)				
No College	0.092	0.290	4025	0.082	0.097	0.093	0.466	0.219	0.379	0.676
				(0.010)	(0.007)	(0.007)				
$\geq$ 4 Years College	0.619	0.486	4025	0.644	0.600	0.625	0.085	0.033	0.348	0.147
				(0.017)	(0.012)	(0.012)				
Num Adults in Household	2.203	0.997	4025	2.205	2.214	2.192	0.818	0.829	0.773	0.527
				(0.036)	(0.024)	(0.025)				
Num Children in Household	0.602	0.942	4025	0.573	0.596	0.623	0.437	0.554	0.209	0.422
				(0.032)	(0.023)	(0.024)				
Income $<$ 70k	0.452	0.498	4025	0.438	0.465	0.448	0.413	0.216	0.658	0.336
				(0.017)	(0.013)	(0.012)				
Primary Shopper	0.836	0.371	4025	0.828	0.847	0.828	0.306	0.246	0.980	0.165
				(0.013)	(0.009)	(0.009)				
Religious	0.388	0.487	4025	0.389	0.388	0.388	0.999	0.986	0.962	0.970
				(0.017)	(0.012)	(0.012)				
Universalism Score	7.647	5.064	4025	7.469	7.694	7.692	0.507	0.290	0.294	0.990
				(0.170)	(0.128)	(0.128)				

Notes: The table presents balance on covariates by treatment group (Control, Biden and Trump) and for those who took the follow up survey. In the first survey, the Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. For each covariate we report the full sample mean, standard deviation and number of observations, and the mean by treatment group with standard errors in parentheses. We also regress each variable on a set of three dummy variables equal to one if the participant was assigned to the Control, or Trump, or Biden treatment group respectively, without a constant term, and report the p-value of the F-test for equality of the three coefficients, as well as pairwise tests with 'C' meaning Control, 'B' meaning Biden, and 'T' meaning Trump. In all cases, p-values were computed using robust standard errors. We report the following covariates in order: (1) age, in years (*Age*), (2) a dummy equal to one if a person is female and zero otherwise (*Female*), (3) a dummy equal to one if they are white/European American (*White*), (4) a dummy equal to one if they are black/African American (*Black*), (5) a dummy equal to one if they are Hispanic or Latino (*Hispanic*), (6) a dummy equal to one if they are Asian/Asian American (*Asian*), (7) a dummy equal to one if a person has not undertaken at least some college study (*No College*), (8) a dummy equal to one if they have completed a 4 year degree or a post-graduate degree ($\geq$ *4 Years College*), (9) the number of adults aged 18 and above in a person's household capped at 10 (*Num Adults in Household*), (10) the number of children under the age of 18 in a person's household capped at 10 (*Num Children in Household*), (11) a dummy equal to one if they have a household income less than $70,000 (*Income* $<$ *70k*), (12) a dummy equal to one if they are the primary shopper for their household (*Primary Shopper*), (13) a dummy equal to one if they have a religion or belief (*Religious*), (14) a measure of a person's relative importance of universalist vs communal values, from -20 to 20 with more positive values representing more importance for universalist values, based on an abridged eight-question version of the Moral Foundations Questionnaire and calculated according to Enke (2020) (*Universalism Score*). The table is based on the sample of all individuals assigned to a treatment group that began the follow up survey (N=4,025).

significance. For the donations outcome, we report that after accounting for representative sample weights, the average donation for the Trump group was 5.35 pp (p=0.032) higher than the Control and 3.69 pp (p=0.069) higher than the Biden group according to columns (1) and



(A) Trump vs Biden

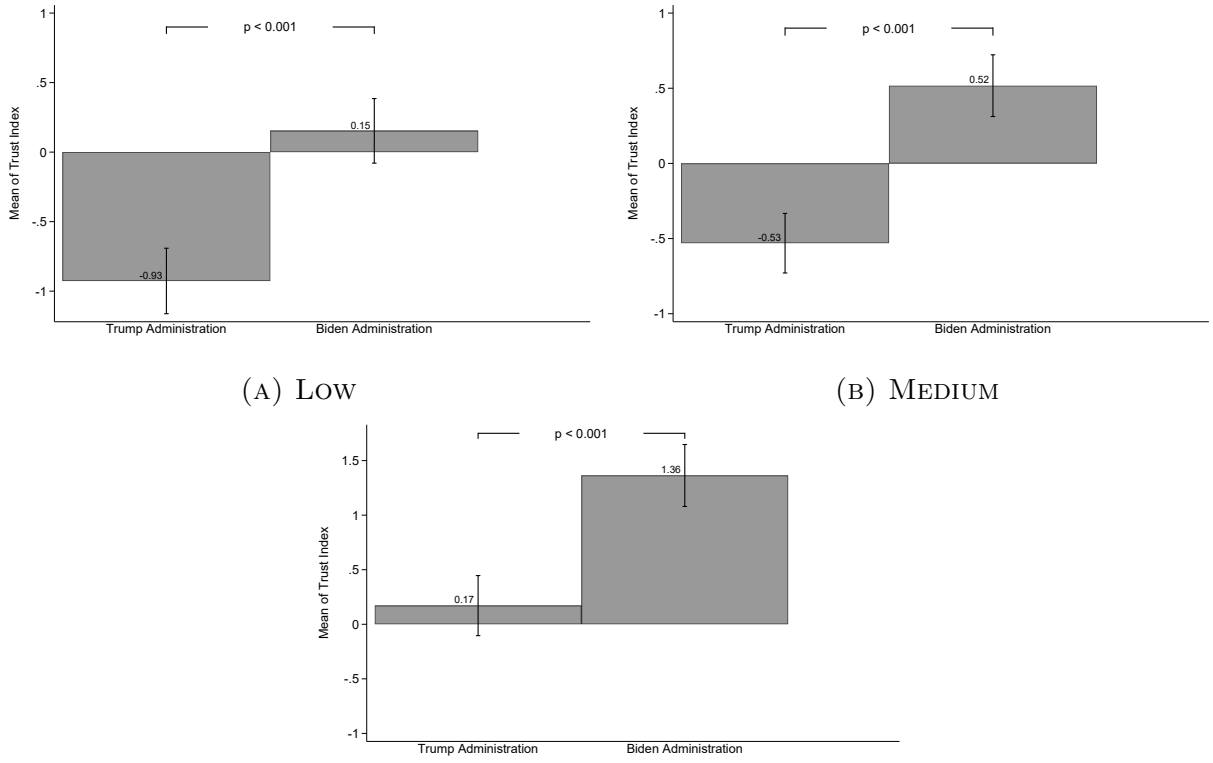


(B) Trump vs Control

Figure A1: WTP by Baseline Consumption (Sample=Follow-up on first day)

Notes: The figures use a sample restricted to those who took the follow-up on the first possible day (3 days after they took survey 1). **Panel A** The figure presents treatment effects of the Trump treatment relative to the Biden treatment, by baseline orange juice consumption. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. We regressed the WTP for the gift card on a dummy equal to one if the individual was assigned to the Trump group, which was interacted with an indicator variable for the baseline consumption category. The sample was limited to those assigned to either the Trump group or the Biden group (and took the follow-up on the first possible day). We then graph the estimated marginal effect of the Trump treatment (relative to Biden) at each of the three baseline consumption groups, with 95% confidence intervals. We also report p-values for pairwise tests for differences in treatment effects between baseline consumption categories. In all cases, p-values were computed using robust standard errors. **Panel B** The figure presents the same information as Panel A, except the comparison treatment group is Control instead of Biden.

(2) of Table A4. There is no significant difference in donations between the Biden and Control groups (p=0.375). The policy index is significantly lower in the Trump and Biden groups compared to the Control group (p<0.001 for both), but with the Trump group significantly lower than the Biden group (p<0.001) according to columns (5)–(8). Column (9) reinforces



(A) Low

(B) Medium

(C) High

FIGURE A2: TRUST BY BASELINE CONSUMPTION

Notes: Panel A: The figure depicts the mean trust index, calculated as the sum of the sign-adjusted standardised scores to four trust questions, by treatment group. The sample is restricted to those who were sometimes consumers and had low baseline consumption of orange juice. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump. The Control group were not asked the trust questions. We also present the 95% confidence intervals for the means. We report the p-value for a regression of the trust index on a dummy equal to one if a person was assigned to the Trump group instead of the Biden group. In all cases, p-values were computed using robust standard errors. **Panel B:** The figure presents the same information as Panel A, except for medium baseline consumers instead of low. **Panel C:** The figure presents the same information as Panel A, except for high baseline consumers instead of low.

that learning about the policy under the outgroup administration significantly reduces trust in the EPA's evaluation ($p<0.001$).

Table A3: Extended Heterogeneity by Strength of Partisanship

	(1) Donations	(2) Policy Index	(3) Trust Index	(4) WTP
Trump × Congr. Dem Support	0.187***	-0.0386***	-0.0416***	0.00176
	(0.0582)	(0.00488)	(0.00413)	(0.00342)
Trump × (-)Trump Support	0.169***	-0.0386***	-0.0341***	-0.00609
	(0.0623)	(0.00580)	(0.00481)	(0.00451)
Trump × Partisanship Index	2.467***	-0.526***	-0.518***	-0.0284
	(0.673)	(0.0621)	(0.0518)	(0.0443)
Trump × High Congr. Dem Support	8.572***	-1.471***	-1.589***	-0.0512
	(2.389)	(0.196)	(0.175)	(0.136)
Trump × Low (+)Trump Support	6.187**	-1.340***	-1.180***	-0.300*
	(2.998)	(0.242)	(0.220)	(0.180)
Trump × High Partisan Index	8.147***	-1.441***	-1.463***	-0.166
	(2.388)	(0.196)	(0.176)	(0.135)
Observations	4372	4372	4372	3135
Mean dep. var.	36.820	-0.328	0.005	1.649
SD dep. var.	39.612	3.316	2.987	1.868

Notes: The table presents the heterogeneity results by strength of partisanship for four outcomes: USPIRG donations, policy support index, trust index, and willingness to pay for orange juice vouchers. All regressions are restricted to the sample of those assigned to either the Trump or Biden groups. For each cell, we regress the dependent variable on a Trump group dummy interacted with the heterogeneity variable without any further controls, and report the coefficient of the interaction term. We report heterogeneity along the following variables: (1) agreement with supporting the Democratic Party for Congress (0-100), (2) agreement with voting for Donald Trump in 2024 (0-100) multiplied by -1, (3) partisanship index based on variables (1) and (2), (4) a dummy equal to one if the person is above-median likely to vote for the Democratic Party, (5) a dummy equal to one if the person is below-median likely to vote for Donald Trump, (6) a dummy equal to one if the person has an above-median value of the partisanship index (3). Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A4: Sample Reweighting: Policy and Trust Outcomes

	Donations				Policy Index				Trust index
	(1) vs Control	(2) vs Control	(3) vs Biden	(4) vs Control	(5) vs Control	(6) vs Control	(7) vs Biden	(8) vs Control	(9) vs Biden
Trump	5.349**		3.693*	5.467**	-2.225***		-1.237***	-2.232***	-1.205***
	(2.489)		(2.030)	(2.568)	(0.298)		(0.198)	(0.301)	(0.161)
Biden		2.200		1.795		-1.036***		-1.008***	
		(2.477)		(2.474)		(0.249)		(0.269)	
Constant	11.10*	2.360	7.762	7.001	2.208**	2.260***	0.827	2.043***	1.656***
	(6.285)	(5.194)	(5.839)	(5.180)	(1.007)	(0.542)	(0.873)	(0.760)	(0.452)
Observations	3275	3267	4348	5445	3275	3267	4348	5445	4348
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reweighted	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
p-value	0.0317	0.3745	0.0689	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001
Mean dep. var.	42.129	39.992	41.807	41.353	-0.266	0.509	-0.432	-0.095	-0.0633

Notes: The table reports pairwise and pooled treatment effects for the donations, policy index, and trust index outcomes, with representative sample weights and excluding from the sample anyone who did not complete all the outcome questions in survey 1. There are three treatment groups: Control, Biden and Trump. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. Columns (1)–(4) provide results with the percentage of the bonus payment donated to United States Public Interest Research Group (USPIRG) as the dependent variable. For each column, the comparison (base) group is indicated directly under the column number. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group, and limit the sample to those in either the Trump or Control groups. For column (2) this is repeated but with Biden instead of Trump. In column (3) we limit the sample to those assigned to the Trump or Biden groups. In column (4), we pool all three treatment groups. Columns (5)–(8) present the same specifications as (1)–(4) but with the policy index as the dependent variable. Column (9) has the trust index as the dependent variable. All regressions include the following controls: age, number of adults (over 18) in the household capped at 10, number of children in the household capped at 10, a measure of a person's relative importance of universalist vs communal values based on an abridged Moral Foundations Questionnaire and calculated according to Enke (2020), fixed effects for gender categories (male, female, non-binary, other and refused answer), a dummy equal to one if they are white/European American, a dummy equal to one if they are black/African American, a dummy equal to one if they are Hispanic or Latino, a dummy equal to one if they are Asian/Asian American, a dummy equal to one if a person has not undertaken at least some college study, a dummy equal to one if they have completed a 4 year degree or a post-graduate degree, a dummy equal to one if they have a religion or belief, and strata fixed effects. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A5 reports the equivalent results for the measures of demand for citrus products. For planned consumption (columns (1)–(4)), which was asked in survey 1 for a 15% subsample of respondents, we report no significant difference between the Trump and Biden groups (p=0.291), consistent with the main results without reweighting as reported in the paper. The estimates comparing Control with Trump and Biden respectively are also similar in magnitude and direction to their main result counterparts, however they are noisy. For the WTP outcome (columns (5)–(8)), we report no significant treatment effects. In particular, there is no significant difference between the Trump and Biden groups (p=0.937).

Table A5: Sample Reweighting: Demand Outcomes

	Planned Consumption				WTP			
	(1) vs Control	(2) vs Control	(3) vs Biden	(4) vs Control	(5) vs Control	(6) vs Control	(7) vs Biden	(8) vs Control
Trump	-5.824		4.320	-6.040	-0.174		0.00792	-0.172
	(4.860)		(4.087)	(5.060)	(0.140)		(0.100)	(0.147)
Biden		-10.85*		-10.56*		-0.156		-0.174
		(5.765)		(5.700)		(0.138)		(0.145)
Constant	58.02***	54.53***	33.99***	51.82***	0.953***	0.648**	0.953***	0.935***
	(9.852)	(13.27)	(8.183)	(9.477)	(0.300)	(0.323)	(0.260)	(0.257)
Observations	488	501	648	819	2390	2363	3133	3943
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reweighted	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
p-value	0.2314	0.0605	0.2909	-	0.2159	0.2559	0.9369	-
Mean dep. var.	45.831	44.667	40.960	43.574	1.714	1.703	1.641	1.682

Notes: The table reports pairwise and pooled treatment effects for the planned consumption and WTP outcomes, with representative sample weights and excluding from the sample anyone who did not complete all the outcome questions in survey 1. There are three treatment groups: Control, Biden and Trump. The Biden group were presented with arguments against the policy, and then informed about the EPA's defence under the Biden administration. For the Trump group, Biden was replaced by Trump; for the Control group, this information is not presented at all. Columns (1)–(4) provide results with the reported likelihood of consuming citrus products in the next month as the dependent variable. For each column, the comparison (base) group is indicated directly under the column number. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group, and limit the sample to those in either the Trump or Control groups. For column (2) this is repeated but with Biden instead of Trump. In column (3) we limit the sample to those assigned to the Trump or Biden groups. In column (4), we pool all three treatment groups. Columns (5)–(8) present the same specifications as (1)–(4) but with the WTP outcome as the dependent variable. All regressions include the following controls: age, number of adults (over 18) in the household capped at 10, number of children in the household capped at 10, a measure of a person's relative importance of universalist vs communal values based on an abridged Moral Foundations Questionnaire and calculated according to Enke (2020), fixed effects for gender categories (male, female, non-binary, other and refused answer), a dummy equal to one if they are white/European American, a dummy equal to one if they are black/African American, a dummy equal to one if they are Hispanic or Latino, a dummy equal to one if they are Asian/Asian American, a dummy equal to one if a person has not undertaken at least some college study, a dummy equal to one if they have completed a 4 year degree or a post-graduate degree, a dummy equal to one if they have a religion or belief, and strata fixed effects. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

A.4 Supplementary Experiment

In the paper, we discuss a supplementary experiment conducted to examine heterogeneity in treatment effects by baseline trust in regulatory agencies and verify that participants retained the information intervention during the obfuscated follow-up survey. Below, we present additional tables and figures that support the analysis of the supplementary experiment results.

Panel A of Figure A3 shows the distribution of baseline trust in five regulatory agencies (EPA, FDA, Federal Reserve, NPS, and CDC). Panel B presents the distribution of the combined trust score across these agencies, where "Very low trust" was coded as 1, "Somewhat low trust" as 2, "Somewhat high trust" as 3, and "Very high trust" as 4. The figure illustrates that, although our sample consists entirely of Democrats, baseline trust in agencies varies substantially, particularly in the combined score. This variation makes it meaningful to analyse heterogeneity in treatment effects by below- versus above-median baseline trust levels.

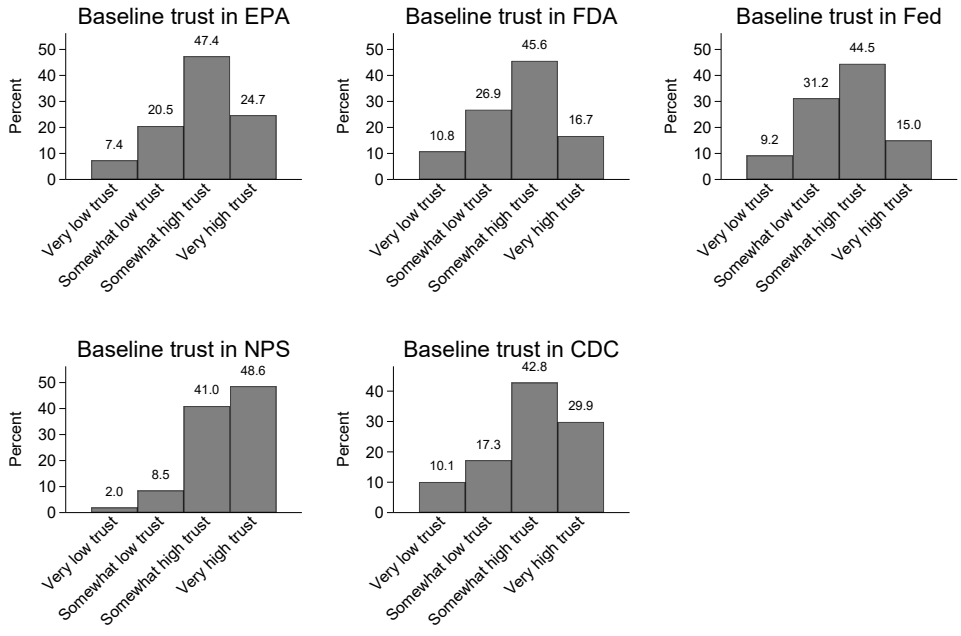
Table A6 compares the main experiment sample with the supplementary experiment sample across demographic covariates. The two samples do not differ meaningfully in age, race, sex, or educational attainment.

Table A6: Supplementary Sample Representativeness

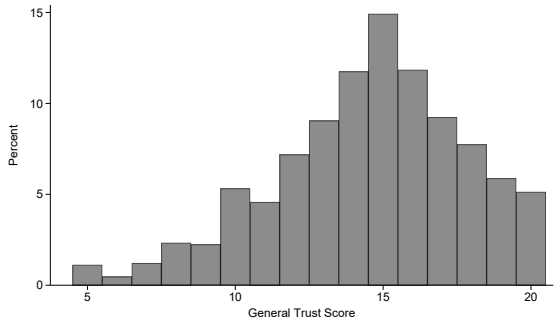
	Main Sample	Additional Sample
Age	40.322	42.725
Black	0.190	0.203
White	0.664	0.680
Asian	0.114	0.078
Hispanic	0.091	0.082
Female	0.604	0.583
High School	0.995	0.996
Four Year Degree	0.618	0.611

Notes: The table presents the means of demographic variables for participants in the main sample, and the supplementary experiment sample. We report the following covariates in order: (1) age, in years (*Age*), (2) a dummy equal to one if they are black/African American (*Black*), (3) a dummy equal to one if they are white/European American (*White*), (4) a dummy equal to one if they are Asian/Asian American (*Asian*), (5) a dummy equal to one if they are Hispanic or Latino (*Hispanic*), (6) a dummy equal to one if a person is female and zero otherwise (*Female*), (7) a dummy equal to one if a person has completed high school (*High School*), (8) a dummy equal to one if they have completed a 4 year degree or a post-graduate degree ($\geq$ *4 Years College*).

Eligible participants in the supplementary experiment were invited to complete an obfuscated follow-up survey. Below, we present results for the pre-registered outcomes measured in that survey. Table A7 reports treatment effects on familiarity with the EPA regulation. Table A8 presents treatment effects on knowledge of which presidential administration issued the EPA regulation on antibiotic spraying of citrus crops, providing evidence on participants' recall of the key treatment information. Table A9 shows treatment effects on posterior trust in the EPA's evaluation of the regulation's safety. Finally, Table A10 reports treatment effects



(A) Individual Agency Trust



(B) Combined Trust Score

Figure A3: Baseline Trust in Agencies

Notes: The figure reports respondents' level of trust in five agencies (EPA, FDA, Federal Reserve, National Park Service, and CDC). **Panel A** shows the levels of reported trust for each agency individually on a four-point scale. **Panel B** shows the distribution of a general trust score, calculated by assigning values 1–4 to the four-point scale and summing across agencies (EPA, FDA, Federal Reserve, National Park Service, CDC). The figure uses the supplementary experiment sample data.

on posterior confidence in regulatory agencies, with Panel A focusing on the EPA and Panel B on general trust across multiple agencies.

Table A7: Treatment Effects on Familiarity with EPA Regulation

	(1) vs Pure	(2) vs Control	(3) vs Biden
Biden and Trump	32.10***	9.186***	
	(2.868)	(2.884)	
Trump			2.781
			(2.561)
Constant	22.35***	45.26***	53.05***
	(2.566)	(2.584)	(1.800)
Observations	622	625	500
p-value (Treatment)	< 0.0001	0.0015	0.2781
Mean dep. var.	48.154	52.613	54.450
SD dep. var.	31.295	28.921	28.646

Notes: The table reports the regression results with the reported familiarity with the EPA's regulation that allows using antibiotics on citrus crops (from 0 "Never heard of it" to 100 "Very familiar") as the dependent variable. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to either the Trump or Biden groups, and limit the sample to those in the Trump, Biden or Pure groups. For column (2) this is repeated but using the sample of individuals in the Trump, Biden and Control groups. In column (3) we regress the dependent variable on a Trump dummy and limit the sample to those assigned to the Trump or Biden groups. All regressions use the supplementary experiment sample data. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A8: Treatment Effects on Knowledge of President at Regulation Time

	(1) vs Pure	(2) vs Biden	(3) vs Pure	(4) vs Trump
Trump	0.441***	0.478***		
	(0.0466)	(0.0379)		
Biden			0.412***	0.481***
			(0.0453)	(0.0359)
Constant	0.182***	0.145***	0.149***	0.0794***
	(0.0352)	(0.0224)	(0.0324)	(0.0171)
Observations	373	500	369	500
Answer	Trump	Trump	Biden	Biden
p-value (Treatment)	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mean dep. var.	0.480	0.386	0.425	0.318
SD dep. var.	0.500	0.487	0.495	0.466

Notes: The table reports the regression results with a dummy equal to 1 if the individual responds with the corresponding "Answer" value when asked during whose presidency the EPA issued the regulation as the dependent variable. In column (1) we consider an answer of "Donald Trump" and regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group, limiting the sample to those in the Trump or Pure groups. For column (2) this is repeated but using the sample of individuals in the Trump and Biden groups. In column (3) we consider an answer of "Joe Biden" and regress the dependent variable on a Biden dummy, limiting the sample to those assigned to the Biden or Pure groups. In column (4), this is repeated but using the sample of individuals in the Biden and Trump groups. All regressions use the supplementary experiment sample data. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A9: Treatment Effects on Endline Trust in the EPA's Evaluation

	(1) vs Biden	(2) vs Biden	(3) vs Biden	(4) vs Control	(5) vs Pure
Trump	-0.669***	-0.687***	-0.734***	-1.312***	-1.467***
	(0.173)	(0.163)	(0.163)	(0.201)	(0.204)
Constant	-0.0112	-1.413***	-2.856***	0.632***	0.787***
	(0.115)	(0.312)	(0.356)	(0.154)	(0.158)
Observations	500	500	500	377	373
Control for Baseline EPA Trust	No	Yes	No	No	No
Control for Baseline General Trust	No	No	Yes	No	No
p-value (Treatment)	0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mean dep. var.	-0.348	-0.348	-0.348	-0.245	-0.204
SD dep. var.	1.966	1.966	1.966	2.042	2.072

Notes: The table reports the regression results with the trust index as the dependent variable. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group, limiting the sample to those in the Trump or Biden groups. For column (2) this is repeated but we additionally control for fixed effects for baseline trust in the EPA on a four-point scale, and for column (3) we instead control for baseline general trust score, calculated by assigning values 1–4 to the four-point scale and summing across agencies (EPA, FDA, Federal Reserve, National Park Service, CDC). In column (4), we repeat the specification in (1) but instead limit the sample to those assigned to either the Trump or Control groups. In column (5), we repeat the specification in (1) but instead limit the sample to those assigned to either the Trump or Pure groups. All regressions use the supplementary experiment sample data. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

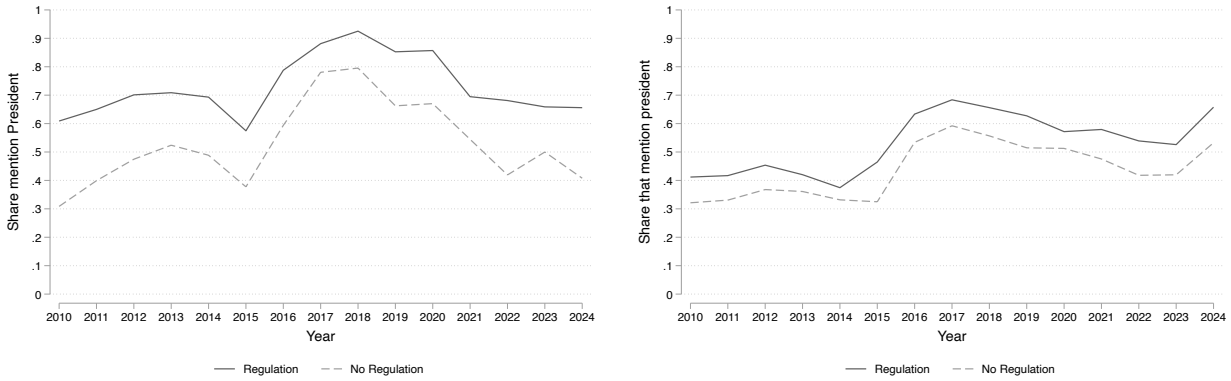
Table A10: Treatment Effects on Endline Trust in the EPA and Agencies

	(1) vs Biden	(2) vs Biden	(3) vs Biden	(4) vs Control	(5) vs Control	(6) vs Control	(7) vs Pure	(8) vs Pure	(9) vs Pure
Panel A: Endline Confidence in EPA									
Trump	-2.469	-2.767	-3.698*	-4.703	-3.770	-4.443*	-5.448*	-4.788*	-5.431**
	(2.314)	(1.976)	(2.028)	(2.980)	(2.430)	(2.555)	(2.848)	(2.582)	(2.502)
Constant	62.32***	33.39***	8.297*	64.55***	33.14***	5.867	65.30***	36.53***	8.074
	(1.529)	(4.435)	(4.943)	(2.421)	(5.361)	(6.318)	(2.255)	(6.245)	(6.396)
Observations	500	500	500	377	377	377	373	373	373
Control for Baseline EPA Trust	No	Yes	No	No	Yes	No	No	Yes	No
Control for Baseline General Trust	No	No	Yes	No	No	Yes	No	No	Yes
p-value (Treatment)	0.2865	0.1621	0.0688	0.1154	0.1216	0.0828	0.0565	0.0645	0.0306
Mean dep. var.	61.074	61.074	61.074	61.408	61.408	61.408	61.617	61.617	61.617
SD dep. var.	25.906	25.906	25.906	27.476	27.476	27.476	26.812	26.812	26.812
Panel B: General Endline Confidence in Agencies									
Trump	0.224	0.0489	-0.684	-3.200	-2.532	-3.018	-0.692	-0.302	-0.679
	(1.648)	(1.479)	(1.429)	(2.157)	(1.878)	(1.898)	(2.252)	(2.138)	(1.997)
Constant	67.62***	50.69***	27.70***	71.05***	55.70***	29.85***	68.54***	51.31***	25.48***
	(1.121)	(3.194)	(3.619)	(1.786)	(3.433)	(4.542)	(1.900)	(4.491)	(4.658)
Observations	500	500	500	377	377	377	373	373	373
Control for Baseline EPA Trust	No	Yes	No	No	Yes	No	No	Yes	No
Control for Baseline General Trust	No	No	Yes	No	No	Yes	No	No	Yes
p-value (Treatment)	0.8918	0.9736	0.6325	0.1388	0.1782	0.1126	0.7588	0.8877	0.7341
Mean dep. var.	67.737	67.737	67.737	68.909	68.909	68.909	68.072	68.072	68.072
SD dep. var.	18.422	18.422	18.422	19.492	19.492	19.492	19.746	19.746	19.746

Notes: The table reports the regression results with additional trust measures in the follow-up. In **Panel A**, we report regression results with reported confidence in the EPA (from 0 "No confidence at all" to 100 "Complete confidence") as the dependent variable. In column (1) we regress the dependent variable on a dummy equal to one if the individual was assigned to the Trump group, limiting the sample to those in the Trump or Biden groups. For column (2) this is repeated but we additionally control for fixed effects for baseline trust in the EPA on a four-point scale, and for column (3) we instead control for baseline general trust score, calculated by assigning values 1–4 to the four-point scale and summing across agencies. In columns (4)–(6), we repeat the specifications in (1)–(3) but instead limit the sample to those assigned to either the Trump or Control groups. In columns (7)–(9), we repeat the specifications in (1)–(3) but instead limit the sample to those assigned to either the Trump or Pure groups. **Panel B** repeats columns provides the same specifications but with the average confidence in three agencies (EPA, NASA, USPS) as the dependent variable. All regressions use the supplementary experiment sample data. Robust standard errors are in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%.

A.5 Additional Media Reporting Analysis

Below, we present additional figures showing the relationship between mentions of a presidential administration and regulations during TV discussions of federal agencies using one minute segments. Figure A4 presents the trends in TV discussions using the one minute segments, where Panel A focuses on the EPA and Panel B on the top 20 agencies. Relative to using 15 second intervals (Figure 2 in the paper), the trends in the shares of segments that mention a president are similar. However, the levels of these shares are substantially larger—they are between 10 and 20 percentage points higher across the fourteen years than when 15 second intervals are used. This increase can be driven by both improvements in measuring overlap as well as misclassifications due to unrelated discussions of a presidential administration within the longer segments.



(A) EPA

(B) Top 20 agencies

Figure A4: Presidential Mentions in Regulation Coverage (1-Min Segments)

Note: We use the GDELT Television Archive dataset of transcripts of shows on three US news networks (Fox News, CNN, MSNBC) organised into one-minute segments. For each segment mentioning a regulation by an agency, we check whether it also mentions the presidential administration. Combining the segments at the agency-station-date level, we report the likelihood that where regulation is mentioned, the presidential administration is also named (solid line). We also report the likelihood that the administration is named during segments where an agency is mentioned but no regulation is discussed (dashed line). **Panel A** shows the likelihood over time for regulation by the Environmental Protection Agency. **Panel B** demonstrates the same variable for the top twenty agencies with the highest number of mentions throughout the sample period.

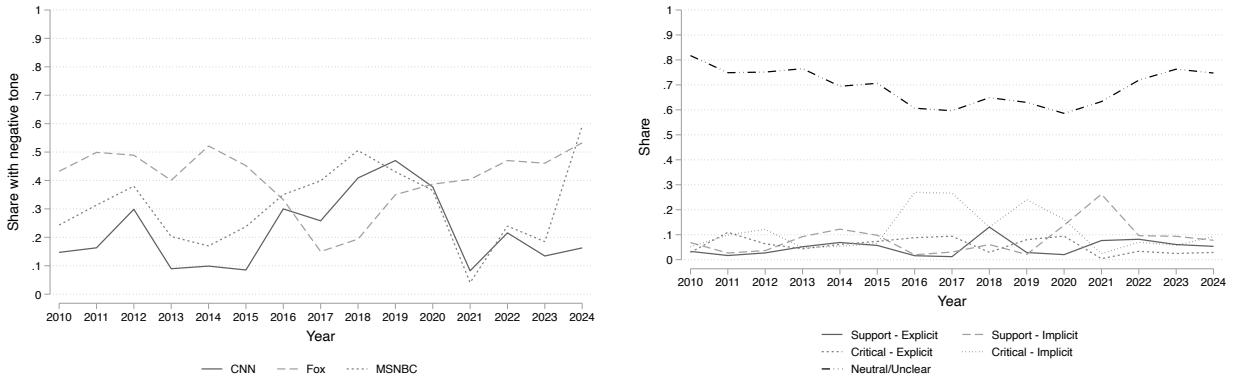
To further investigate how coverage of the EPA varies over time, we use a large language model (LLM) to classify the content of televised news transcripts. The analysis focuses on 12,857 one-minute segments that mention the EPA and also reference a presidential administration, and in many cases, a specific regulation or policy. Each transcript is evaluated using the OpenAI GPT-4o-mini model with a structured prompt designed to capture two key dimensions of political communication. We provide the specific LLM prompt below in Section A.6.

First, the model assesses the affective tone or framing of each segment—whether the

broadcast conveys a positive, negative, or neutral emotional characterisation (e.g., optimistic, alarmist, reassuring)—and assigns a continuous tone score ranging from -1 to 1. This approach follows recent work in media economics that uses text-based embeddings to quantify evaluative polarity and framing intensity in broadcast and print coverage. Second, the model identifies whether the president or administration expresses or implies criticism, support, neutrality, or no clear stance toward the EPA or its policies. To ensure interpretive validity, stances are attributed only when statements are explicitly made or clearly attributed to the president or administration, while remarks by journalists, legislators, or other actors are excluded.

Panel A in Figure A5 presents how the tone of television coverage toward the EPA evolved from 2010 to 2024 across major cable TV news networks. The figure shows that the share of coverage with a negative tone varies substantially across networks and over time. Notably, Fox News became less negative during the first Trump administration, while left leaning outlets (CNN and MSNBC) display a marked increase in negative tone over the same period. After 2020, negativity on Fox rises again along with declines in negativity on CNN and MSNBC, coinciding with the change in administration.

Panel B of Figure A5 shows the trends of the distribution of presidential stances toward the EPA during the period. Most coverage includes neutral or unclear references while explicit statements of support or criticism are relatively limited. Implicit criticism becomes somewhat more common during the Trump administration—consistent with greater attention to regulatory rollbacks—while implicit support increases modestly in the subsequent years as environmental policy re-emerged as a priority. Overall, the pattern indicates that broadcasts infrequently attributed statements directly to the president; instead, they conveyed stances indirectly through the framing of actions and policies. Even when analysing these statements, the resulting net imbalance between critical and supportive coverage is small.



(A) Tone of Coverage

(B) Presidential Support

Figure A5: Tone and Presidential Stance in TV Coverage of the EPA

Note: We use transcripts from the GDELT Television Archive covering three major U.S. cable news networks (Fox News, CNN, and MSNBC) from 2010–2024. Each one-minute transcript is classified using a large language model (OpenAI GPT-4o-mini) to assess two dimensions: (i) the overall affective tone of the broadcast and (ii) whether the president or administration expresses or implies criticism, support, neutrality, or no clear stance toward the EPA or its regulations. Panel A reports the share of segments that have a negative overall tone of EPA coverage over time by network. Panel B reports the share of segments classified as critical, supportive, neutral, or unclear toward the EPA.

A.6 LLM Prompt

You are a political communication analyst trained to evaluate cable-news transcripts for two dimensions:

1. the stance of the president or their administration toward the EPA (Environmental Protection Agency) and/or the agency's regulations, and
2. the overall tone of the coverage.

Part 1 — Stance Classification
Determine whether the **president or administration** expresses or implies criticism/opposition, support, neutrality, or no clear stance toward the EPA and/or one of its policies/regulations.

****Attribution rule (critical):****
Only attribute a stance if it clearly originates from the **president or administration**. If the evaluation or criticism comes from **journalists, legislators, commentators, or other third parties**, or if attribution is ambiguous, classify as **"unclear."**

Decision rules:

- Critical/Oppositional: the president/administration criticizes the staff or positions of the agency, blames, distances from, or seeks to limit the agency's authority/leadership/policy; includes appointing or empowering known opponents of the agency's mission.
- Supportive: the president/administration praises, defends, cooperates with, delegates authority to, or otherwise aligns with the agency/policy.
- Neutral: factual/procedural mention of the agency/policy without evaluative content by the president/administration.
- Unclear/Irrelevant: no statement or action by the president/administration is present, or criticism/support is expressed only by third parties.

Ignore third-party opinions unless clearly attributed to the president/administration

Provide a concise rationale summarizing key linguistic or contextual cues supporting your stance and explicitness judgment.

Part 2 — Explicitness Tag
Label the explicitness only when a stance is expressed by the president or administration:

- Explicit: directly stated or quoted from the president/administration.
- Implicit: inferred from their actions, appointments, or attributed motives.
- None: no stance from the president/administration is present.

Part 3 — Tone of Coverage (continuous)

Assess the **overall affective tone or framing** of the broadcast — how it sounds, not what side it supports.

Do **not** infer tone from the topic itself (e.g., disasters or pollution $\neq$ negative). Tone reflects emotional framing and presentation.

- **Positive**: approving, upbeat, confident, reassuring
- **Negative**: critical, alarmist, cynical, hostile
- **Neutral**: descriptive, procedural, informational

Scoring rules (continuous scale):

- Assign a 'tone_score' in the range **$[-1.00, +1.00]$**, using two decimals.
- Avoid coarse values (e.g., -1.00, -0.50, 0.00, $+0.50$, $+1.00$) unless the tone is clearly extreme.
- Calibrate roughly as:
  - $\leq -0.70 \rightarrow$ strongly negative (sustained hostility or derision)
  - $\approx -0.40 \rightarrow$ moderately negative (clear but measured criticism)
  - $\approx 0.00 \rightarrow$ neutral (descriptive, balanced)
  - $\approx +0.40 \rightarrow$ moderately positive (supportive, optimistic)
  - $\geq +0.70 \rightarrow$ strongly positive (celebratory, reassuring)
- Include:
  - 'tone_confidence' $\in [0,1]$ for certainty of tone judgment

Return ONLY a single valid JSON object with this schema:

```
{{
  "stance": "critical" | "supportive" | "neutral" | "unclear",
  "explicitness": "explicit" | "implicit",
  "confidence": number,
  "stance_rationale": string,
  "coverage_tone": "positive" | "negative" | "neutral",
  "tone_score": number,
  "tone_confidence": number,
}}
```

The following text is the full transcript. Do not quote or reformat it.

⟨ TRANSCRIPT_START ⟩
{text}
⟨ TRANSCRIPT_END ⟩

Now return ONLY a single valid JSON object, strictly following the schema above.

B Survey 1

B.1 Demographics and Attention

A. What is your age (years)?

- I am *[Note: Text entry question. Only values between 18 and 89 were allowed.]*
- I'd prefer not to answer

B. What is your gender?

- Female
- Male
- Non-binary
- Other (please describe if you wish) *[Note: Text entry]*
- I'd prefer not to answer

C. Please select your state of residence.

D. What is your ethnicity? Please select all that apply.

- White or European American
- Black or African American
- Hispanic or Latino
- Asian or Asian American
- Other (please specify if you wish) *[Note: text entry]*
- I'd prefer not to answer

E. What is the highest level of education you have completed?

- Less than high school
- High school graduate
- Some college
- 2 year degree
- 4 year degree
- Master's degree

- Doctorate degree
- Professional degree (JD, MD, etc.)

F. The next question is about the following problem. In questionnaires like ours, sometimes there are participants who do not carefully read the questions and just quickly click through the survey. This means that there are a lot of random answers which compromise the results of research studies. To show that you read our questions carefully, please choose both "Extremely interested" and "Not interested at all" as your answer in the next question. Do not select any other option. How interested are you in sports?

- Extremely interested
- Very interested
- A little bit interested
- Almost not interested
- Not interested at all

G. Generally speaking, do you usually think of yourself as a Republican, a Democrat, or an Independent?

- Republican
- Democrat
- Independent

Note: This question appears if "Independent" is selected in Part G.

H. As an Independent, do you think of yourself as closer to Republicans or Democrats?

- Republicans
- Democrats

I. In your household, how many...

- Adults are there, including yourself (18 and above)? *[Note: Participants had to choose one value from a drop-down list. The options included: integers from 1 to 10.]*
- Children under the age of 18 are there? *[Note: Participants had to choose one value from a drop-down list. The options included: integers from 0 to 10.]*

J. What was your gross **household** income in 2023 in US dollars?

- Less than $10,000
- $10,000 - $19,999
- $20,000 - $29,999
- $30,000 - $39,999
- $40,000 - $49,999

- $50,000 - $59,999
- $60,000 - $69,999
- $70,000 - $79,999
- $80,000 - $89,999
- $90,000 - $99,999
- $100,000 - $149,999
- More than $150,000

K. How often in the **past month** did you do the following?

- Grocery shopping for your household
- Buy milk
- Consume milk
- Buy orange juice
- Consume orange juice
- Buy bread
- Consume bread

Note: For each statement, participants were required to choose one of the following options: "Never", "Once or twice a month", "Once a week", "A few times a week", "Every day".

L. In general, are there any of these products that you **never** consume? Select all that apply.

- Milk
- Orange juice
- Bread
- I consume all of them at least occasionally

M. Generally speaking, are you the primary shopper for your household?

- Yes
- No

N. What is your religion or belief?

- Roman Catholic
- Protestant (Mainline)
- Evangelical/Non-denominational Christian
- Mormon
- Eastern or Greek Orthodox
- Jewish
- Muslim
- Buddhist

- Hindu
- Agnostic
- No religion
- Other (please specify if you wish) *[Note: Text entry]*
- I'd prefer not to say

O. When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?

- Whether or not someone suffered emotionally
- Whether or not some people were treated differently than others
- Whether or not someone's action showed love for his or her country
- Whether or not someone showed a lack of respect for authority
- Whether or not someone cared for someone weak or vulnerable
- Whether or not someone acted unfairly
- Whether or not someone did something to betray his or her group
- Whether or not someone conformed to the traditions of society

Likert scale: "Not at all relevant", "Not very relevant", "Slightly relevant", "Somewhat relevant", "Very relevant", "Extremely relevant".

B.2 Background Information

Thank you for taking the time to answer the questions about your background.

We are a group of **non-partisan researchers** interested in public policy issues.

You will now receive information about the following public policy issue: **Agriculture and Crop Diseases.**

Crop diseases pose a major risk to agricultural productivity in the United States. For example, **citrus greening disease wreaks havoc in Florida and California**, threatening a multi-billion dollar **citrus (oranges, lemons, etc.)** industry.



In 2019, Nature reported that in the Florida orange industry "**almost half the acreage** that

was in production before the disease arrived [in 2005] has been **abandoned**" and, by some estimates, "up to **90% of trees** in the state have been **infected and will eventually die**." Up to what percentage of Florida orange trees were reported to be infected by citrus greening and will eventually die?

- % of Florida orange trees

Note: Participants were required to choose an integer between 0 and 100 using a slider.

In response to the disease, **large quantities of the antibiotics** streptomycin and oxytetracycline have been **sprayed** on citrus trees in the United States.



Since the arrival of the disease, multiple pieces of regulation have been issued to allow spraying of citrus crops. For example, in 2023, existing regulations allowed "**as much as 650,000 pounds of streptomycin to be sprayed** on citrus crops" per year. By comparison, Americans use 14,000 pounds per year of aminoglycosides, the class of antibiotics that includes streptomycin, to treat moderate to severe bacterial infections such as pneumonia and E.Coli.

Which of the following antibiotics have been **sprayed in large quantities** to tackle citrus greening in the United States? Select **all** that apply.

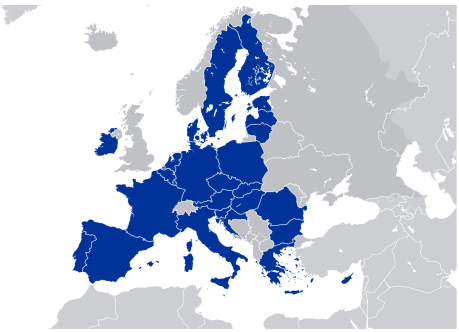
- sulfamethoxazole
- oxytetracycline
- ofloxacin
- streptomycin

B.3 Opponents Arguments

Note: This block appeared only for participants assigned to the Trump and Biden groups.

Spraying of citrus trees with streptomycin has been met with **significant opposition** in the United States. In this section, you will learn more about the **arguments against spraying antibiotics** on citrus trees.

In some places outside of the United States, such as the **European Union and Brazil**, the spraying of streptomycin on crops **has been banned for many years**.



In which of these places is spraying streptomycin on crops NOT permitted? Select **all** that apply.

- European Union
- United States
- Brazil
- None of the above

Argument 1: Antibiotic Resistance

In the United States, a representative from an advocacy group argued that "[i]n a pandemic era and an age of **antibiotic overuse**, we cannot afford to risk further public health crises from **antibiotic resistance**. The use of streptomycin as a pesticide needlessly and **dangerously exposes farmworkers, communities**, and the environment to an increased, unacceptable, and unlawful risk of harm, and should immediately cease."



It is reported that "scientists are especially worried that the drugs will cause pathogenic **bacteria in the soil to become resistant to the compounds** and then **find their way to people** through groundwater or contaminated food."

"Drug-resistant infections **kill 23,000 Americans** each year and **sicken two million**, according to the C.D.C. As more germs mutate, the threat is growing."

According to the text above, which of the following statements are true or false?

- Drug resistant infections kill 23,000 Americans each year
- Texas is a province of Canada

- Spraying crops with antibiotics can lead to soil-based bacteria developing immunity to antibiotics
- People cannot catch antibiotic resistant infections from consuming contaminated food or water

Note: For each statement, participants were required to select one of the following options: "True", "False".

Argument 2: Direct Effects of Exposure

On top of the threat of building antibiotic resistance, "[a]ntibiotics sprayed on crops can affect farm workers or **people who directly consume contaminated fruit**".



Beyond Pesticides, a group encouraging opposition to antibiotic spraying, states that "**[e]xposure to antibiotics can disturb the microbiota in the gut**. In addition to interfering with digestion, a disrupted gut microbiome can contribute to a **whole host of '21st century diseases'**" such as inflammatory bowel disease.

A physician from the Migrant Clinician Network (MCN), a group of physicians who oppose streptomycin spraying, points out that "direct exposure to **streptomycin can cause harmful toxicity**." Another physician from MCN explains that "pesticide residue remains in the air and on surfaces for a **very long time** after it is initially sprayed" and can be transferred by contact.

Which of the following points are mentioned in the text above? Select **all** that apply.

- Antibiotic spraying can harm people who directly consume contaminated fruits.
- Farmers are at risk of skin allergies as a result of antibiotic spraying.
- Children are particularly vulnerable to negative consequences of consuming contaminated fruits.
- Spraying can lead to multiple diseases through disturbing microbiota in the gut.

B.4 Trump Block (EPA)

Note: This block appeared only for participants assigned to the Trump treatment group and were assigned to see the EPA mentioned explicitly.

The Environmental Protection Agency (EPA) issued a final authorization decision, **allowing U.S. farmers to spray large quantities of the antibiotic streptomycin** on **citrus crops** to combat citrus greening.

The authorization decision was supported by the administration of President **Donald Trump**.

In particular, the EPA under the administration of President **Donald Trump** provided arguments and **scientific evidence** supporting the position that **antibiotic spraying of citrus crops** poses **little risk** and "meets the regulatory and safety standards."

In the years following the final authorization decision, considerable efforts have been made to overturn the antibiotic spraying policy in the courts. **Despite the legal challenge**, spraying of streptomycin on citrus crops was **permitted to continue** as of December 2023. Additionally, applying other antibiotics on citrus crops, such as oxytetracycline, is permitted under separate regulations.



Donald Trump with his EPA head Andrew Wheeler.



Donald Trump appointed EPA head Andrew Wheeler.

Note: Participants saw only one of these images depending on whether they were assigned to see portraits (the right image) or an image of the president with their EPA head (left image).

According to the text above, the EPA provided scientific evidence in favor of antibiotic spraying of citrus crops under the administration of which president?

- Barack Obama
- Joe Biden
- Donald Trump
- George W. Bush

Which of the following statements are true? Select **all** that apply.

- The policy allowing spraying of citrus crops with antibiotics continues until this day.
- Farmers need to apply for a special permit before they can start spraying their crops.
- The EPA argued that antibiotic spraying of citrus crops poses little risk and meets safety standards.

Note: The information and questions below appeared on the following page of the survey, accompanied by the same photo that was displayed above.

Below, we list several statements backed by **scientists from the EPA** in favor of streptomycin spraying of citrus crops.

1. "EPA **thoroughly evaluated** both ecological and **human health** risks, including the potential development of **antibiotic resistance** in human and in plant pathogens."

2. "Streptomycin is practically **non-toxic** and poses **limited risk**."

3. "EPA concluded that it is '**unlikely**' that any current **resistance to streptomycin** in 'clinical' applications, i.e., human pharmaceuticals, '**is due to streptomycin's use in agriculture.**'"

4. "EPA also conducted risk assessments to **evaluate the risk to human health**, concluding there are **'no risks of concern.'**"

5. "EPA found **no evidence** that streptomycin was a carcinogen, [...], no residual exposure concerns, [...] and no indication of a dermal hazard."

Select **all** points covered by the EPA's statements listed above.

- The EPA specifically evaluated streptomycin's impact on pollinators, such as bees, and concluded that there are no risks.
- The EPA's decision was preceded by a thorough evaluation.
- Exposure to streptomycin through citrus crops poses considerable risks to human health.
- The policy is unlikely to result in streptomycin resistance which would endanger humans in clinical settings.

B.5 Trump Block (No EPA)

Note: This block appeared only for participants assigned to the Trump treatment group and were assigned NOT to see the EPA mentioned explicitly.

The relevant regulatory agency issued a final authorization decision, **allowing U.S. farmers to spray large quantities of the antibiotic streptomycin** on **citrus crops** to combat

citrus greening.

The authorization decision was supported by the administration of President **Donald Trump**.

In particular, the regulatory agency under the administration of President **Donald Trump** provided arguments and **scientific evidence** supporting the position that **antibiotic spraying of citrus crops** poses **little risk** and "meets the regulatory and safety standards."

In the years following the final authorization decision, considerable efforts have been made to overturn the antibiotic spraying policy in the courts. **Despite the legal challenge**, spraying of streptomycin on citrus crops was **permitted to continue** as of December 2023. Additionally, applying other antibiotics on citrus crops, such as oxytetracycline, is permitted under separate regulations.

Note: The images shown were identical to those shown in the Trump (EPA) block, except the captions were replaced with "Donald Trump with his agency head Andrew Wheeler." and "Donald Trump appointed agency head Andrew Wheeler." respectively. Participants saw only one of these images depending on whether they were assigned to see portraits (the right image) or an image of the president with their EPA head (left image).

According to the text above, the relevant regulatory agency provided scientific evidence in favor of antibiotic spraying of citrus crops under the administration of which president?

- Barack Obama
- Joe Biden
- Donald Trump
- George W. Bush

Which of the following statements are true? Select **all** that apply.

- The policy allowing spraying of citrus crops with antibiotics continues until this day.
- Farmers need to apply for a special permit before they can start spraying their crops.
- The relevant regulatory agency argued that antibiotic spraying of citrus crops poses little risk and meets safety standards.

Note: The information and questions below appeared on the following page of the survey, accompanied by the same photo that was displayed above.

Below, we list several statements backed by **scientists from the regulatory agency** in favor of streptomycin spraying of citrus crops.

1. The relevant regulatory agency"**thoroughly evaluated** both ecological and **human health** risks, including the potential development of **antibiotic resistance** in human and in

plant pathogens."

2. "Streptomycin is practically **non-toxic** and poses **limited risk**."

3. The agency "concluded that it is '**unlikely**' that any current **resistance to streptomycin** in 'clinical' applications, i.e., human pharmaceuticals, '**is due to streptomycin's use in agriculture.**'"

4. The agency "also conducted risk assessments to **evaluate the risk to human health**, concluding there are **'no risks of concern.'**"

5. The regulatory agency "found **no evidence** that streptomycin was a carcinogen, [...], no residual exposure concerns, [...] and no indication of a dermal hazard."

Select **all** points covered by the relevant regulatory agency's statements listed above.

- The relevant regulatory agency specifically evaluated streptomycin's impact on pollinators, such as bees, and concluded that there are no risks.
- The relevant regulatory agency's decision was preceded by a thorough evaluation.
- Exposure to streptomycin through citrus crops poses considerable risks to human health.
- The policy is unlikely to result in streptomycin resistance which would endanger humans in clinical settings.

B.6 Biden Block (EPA)

Note: This block appeared only for participants assigned to the Biden treatment group and were assigned to see the EPA mentioned explicitly.

The Environmental Protection Agency (EPA) issued a final authorization decision, **allowing U.S. farmers to spray large quantities of the antibiotic streptomycin** on **citrus crops** to combat citrus greening.

The authorization decision was supported by the administration of President **Joe Biden**.

In particular, the EPA under the administration of President **Joe Biden** provided arguments and **scientific evidence** supporting the position that **antibiotic spraying of citrus crops** poses **little risk** and "meets the regulatory and safety standards."

In the years following the final authorization decision, considerable efforts have been made to overturn the antibiotic spraying policy in the courts. **Despite the legal challenge**, spraying of streptomycin on citrus crops was **permitted to continue** as of December 2023. Additionally, applying other antibiotics on citrus crops, such as oxytetracycline, is permitted under separate regulations.



Joe Biden with his EPA head Michael S. Regan.



Joe Biden appointed EPA head Michael S. Regan.

Note: Participants saw only one of these images depending on whether they were assigned to see portraits (the right image) or an image of the president with their EPA head (left image).

Note: The remainder of this block was identical to the Trump (EPA) block following the photos.

B.7 Biden Block (No EPA)

Note: This block appeared only for participants assigned to the Biden treatment group and were assigned NOT to see the EPA mentioned explicitly.

The relevant regulatory agency issued a final authorization decision, **allowing U.S. farmers to spray large quantities of the antibiotic streptomycin** on **citrus crops** to combat citrus greening.

The authorization decision was supported by the administration of President **Joe Biden**.

In particular, the regulatory agency under the administration of President **Joe Biden** provided arguments and **scientific evidence** supporting the position that **antibiotic spraying of citrus crops** poses **little risk** and "meets the regulatory and safety standards."

In the years following the final authorization decision, considerable efforts have been made to overturn the antibiotic spraying policy in the courts. **Despite the legal challenge**, spraying of streptomycin on citrus crops was **permitted to continue** as of December 2023. Additionally, applying other antibiotics on citrus crops, such as oxytetracycline, is permitted under separate regulations.

Note: The images shown were identical to those shown in the Biden (EPA) block, except the captions were replaced with "Joe Biden with his agency head Michael S. Regan." and "Joe Biden appointed agency head Michael S. Regan." respectively. Participants saw only one of these images depending on whether they were assigned to see portraits (the right image) or an image of the president with their EPA head (left image).

Note: The remainder of this block was identical to the Trump (No EPA) block following the photos.

B.8 US Citrus Industry Information

Note: This block appeared for all participants.

According to a 2023 United States Department of Agriculture (USDA) report, almost all commercial citrus (oranges, lemons, etc.) production in the United States occurs in Florida, California, Texas and Arizona. The policy allowing streptomycin spraying on citrus crops remained in force in these states as of December 2023.



Citrus production in the United States.

In which of these states is it likely that a significant amount of streptomycin spraying on citrus crops occurred in 2023? Select **all** that apply.

- Texas
- North Carolina
- Ohio
- Florida

B.9 Donation to USPIRG

Note: This block appeared immediately after the US Citrus Industry Information block for those assigned to see the donation task before the Policy and Trust Questions. For participants assigned to see the Policy and Trust Questions first, this block appeared immediately after the Policy and Trust Questions block.

This is your chance to support reducing antibiotic usage in agriculture.

The United States Public Interest Research Group (USPIRG) is a nonpartisan, non-profit organization that advocates against streptomycin spraying on citrus crops. For 40 years, USPIRG has been advocating for the public interest on "problems that affect the public's health, safety and wellbeing."

We are offering all participants an **additional bonus sum of $1**. You may give as much of this bonus as you like to USPIRG and keep the rest for yourself. The amount kept for yourself will be paid through Prolific.

Using the slider below, please choose how much of the bonus you would like to **give to** USPIRG to **oppose antibiotics spraying** on citrus crops.
Note: Participants were required to choose any amount between $0 and $1 using a slider, with precision to two decimal places. The slider was labeled "Donation in $" on the left hand side.

B.10 Policy and Trust Questions

We will now ask you a few questions about the policy of spraying citrus crops with antibiotics in order to fight citrus greening. There are no "right" answers. We would appreciate if you provide honest answers to the questions.

To what extent do you agree with the following statements about the **policy of spraying citrus crops with antibiotics in order to fight citrus greening**?

- The policy is safe as it is endorsed by the relevant government agency.
- The policy has negative consequences on people's health.
- The agency that authorized the policy is located in a semi-detached house on the South Pole.
- I think that antibiotic spraying of citrus crops should be outlawed.
- I support the policy as it helps protect the economy with no major risks involved.

Note: The order in which the statements were displayed was randomized. For each statement, participants were required to choose any integer between 0 and 100 using a slider. Five labels were provided: "Strongly disagree" (0), "Somewhat disagree" (25), "Neither agree nor disagree" (50), "Somewhat agree" (75), "Strongly agree" (100).

To what extent do you agree with the following statements about the arguments in favor of and against the **policy of spraying citrus crops with antibiotics in order to fight citrus greening**?

- I trust the EPA which determined that the policy is safe. *[Note: for those assigned to not see the EPA mentioned, "EPA" was replaced by "relevant regulatory agency".]*
- The arguments provided by the opponents of the policy were convincing.
- The scientific evaluation conducted by the EPA was thorough and I trust it. *[Note: for those assigned to not see the EPA mentioned, "EPA" was replaced by "relevant regulatory agency".]*
- The opponents of the policy are scaremongering.

Note: This question appeared only for participants assigned to either the Trump or Biden

treatment groups. The order in which the statements were displayed was randomized. For each statement, participants were required to choose any integer between 0 and 100 using a slider. Five labels were provided: "Strongly disagree" (0), "Somewhat disagree" (25), "Neither agree nor disagree" (50), "Somewhat agree" (75), "Strongly agree" (100).

B.11 Planned Consumption

Note: The following questions were displayed only to those assigned to be asked the planned consumption question.

We will now ask you a few questions about your grocery shopping. There are no "right" answers. We would appreciate if you provide honest answers to the questions.



How likely are you to purchase orange-based products (such as orange juice) or other citrus-based products in the **upcoming month**?
Note: Participants were required to choose any integer between 0 and 100 using a slider labeled "likelihood" on the left hand side. Five labels were provided: "Very unlikely" (0), "Somewhat unlikely" (25), "Neither likely nor unlikely" (50), "Somewhat likely" (75), "Very likely" (100).

To what extent do you agree with the following statements **when considering whether to purchase citrus-based products in the upcoming month**?

- I am concerned about the health effects of directly consuming citrus products.
- I am concerned about contributing to antibiotic resistance in bacteria.

Note: This question was displayed on the page following the previous question. The order in which the statements were displayed was randomized. For each statement, participants were required to choose any integer between 0 and 100 using a slider. Five labels were provided: "Strongly disagree" (0), "Somewhat disagree" (25), "Neither agree nor disagree" (50), "Somewhat agree" (75), "Strongly agree" (100).

B.12 Politics Questions

To what extent do you agree with the following statement?

- The presidential administration put pressure on the EPA to make scientific claims about streptomycin spraying that benefit the agricultural industry.

Note: This question was displayed only to those in the Trump and Biden treatment groups. For those assigned to not see the EPA mentioned, "EPA" was replaced by "relevant regulatory agency". Participants were required to choose any integer between 0 and 100 using a slider. Five labels were provided: "Strongly disagree" (0), "Somewhat disagree" (25), "Neither agree nor disagree" (50), "Somewhat agree" (75), "Strongly agree" (100).

What percentage of the following groups support the policy of spraying citrus crops with antibiotics in order to fight citrus greening?

BONUS: for each question, if your answer is within +/- 3 percentage points of the true value (as taken from a representative survey), you will receive an additional bonus sum of $0.25, to be paid through Prolific. If any of your answers were sufficiently close, you will be informed about your total bonus at the end of the survey.

- % Republicans who support the policy
- % Democrats who support the policy

Note: For each question, participants were required to choose any integer between 0 and 100 using a slider.

To what extent do you agree with the following statements?

- I will vote in the 2024 presidential elections.
- I support the Democratic Party for Congress.
- I will vote for Donald Trump if he is on the ticket in the 2024 presidential elections.

Note: For each statement, participants were required to choose any integer between 0 and 100 using a slider. Five labels were provided: "Strongly disagree" (0), "Somewhat disagree" (25), "Neither agree nor disagree" (50), "Somewhat agree" (75), "Strongly agree" (100).

We would like to ask you about your feelings toward Democrats and Republicans. Please rate them using the scales below.

Higher ratings mean that you feel warmer and more favorable toward them.

- Democrats
- Republicans

Note: Participants were required to indicate their feelings on a scale from 0 to 100 using a slider. Five labels were provided: "Very cold feeling" (0), "Quite cold feeling" (25), "No feeling

at all" (50), "Quite warm feeling" (75), "Very warm feeling" (100).

B.13 Experiment Questions and Conclusion

Before taking this survey, how familiar were you with the following issues?

- Antibiotic-resistant pathogens and their risk to human health
- Citrus greening disease
- Antibiotic spraying to fight citrus greening

Note: Participants were required to choose any integer between 0 and 100 using a slider. Five labels were provided: "Never heard of the issue" (0), "Mostly unfamiliar" (25), "Quite unfamiliar" (50), "Somewhat familiar" (75), "Very familiar" (100).

What are the first three words that come to your mind when you think of this survey's subject matter?

- Word 1 *[Note: Text entry]*
- Word 2 *[Note: Text entry]*
- Word 3 *[Note: Text entry]*

To what extent do you agree with the following statements?

- The arguments in favor and against the policy of antibiotic spraying were presented in a balanced way.
- I felt pressure to answer the survey questions in a particular way.

Note: This question appeared only for those assigned to either the Trump or Biden groups. For each statement, participants were required to choose any integer between 0 and 100 using a slider. Five labels were provided: "Strongly disagree" (0), "Somewhat disagree" (25), "Neither agree nor disagree" (50), "Somewhat agree" (75), "Strongly agree" (100).

In the question for a bonus, you answered 1 correctly. You will receive a bonus sum of $0.25 via Prolific.

Note: This appeared only for participants who answered exactly one of the partisan beliefs questions correctly within the 3 pp tolerance.

In the question for a bonus, you answered 2 correctly. You will receive a bonus sum of $0.50 via Prolific.

Note: This appeared only for participants who answered both of the partisan beliefs questions correctly within the 3 pp tolerance.

C Follow-up Survey

The survey begins with a short demographics section. Participants were asked about age, state of residence, ethnicity, martial status, employment status, digital platforms used for entertainment, media used to learn about current affairs, frequency of ordering take-out, and preference for buying groceries in-store or having them delivered home.

C.1 Decoy

We want to ask you some questions about grocery store products and brands.

What is your favorite soda?

- Coca-Cola
- Pepsi
- Diet Coke
- Coke Zero
- Dr Pepper
- Mountain Dew
- Sprite
- Fanta
- Diet Pepsi
- Diet Mountain Dew
- 7Up
- Sunkist
- Starry/Sierra Mist
- Other
- I don't drink soda

What is your preferred brand of butter or margarine?

- Land O'Lakes
- Kerrygold
- I Can't Believe It's Not Butter
- Country Crock
- Shedd's
- Darigold
- Move Over Butter
- Imperial
- Smart Balance

- Organic Valley
- Store brand
- Other
- I don't use butter or margarine

What is your preferred brand of shampoo?

- Pantene
- Garnier
- Herbal Essences
- Head and Shoulders
- Dove
- TRESemmé
- Redken
- Suave
- OGX
- Store brand
- Other

We want to know if you recall seeing any advertisements for the products, whether it be on TV, social media, billboards or other.

You said that your favorite soda was X. Do you recall seeing any advertisements for this product in the past week?

- Yes
- No

Note: This question appeared only to those participants who did not answer "Other" or "I don't drink soda" to the question "What is your favorite soda?". X was replaced by the participant's answer to that question.

Do you recall seeing any advertisements for Coca-Cola in the past week?

- Yes
- No

Note: This question appeared only to those participants who answered "Other" or "I don't drink soda" to the question "What is your favorite soda?".

In the past week, do you recall seeing any advertisements for any of these butter or margarine brands?

- Kerrygold

- Smart Balance
- I Can't Believe It's Not Butter
- Darigold
- Imperial

Note: For each brand, participants were required to select one of the following options: "Yes", "No".

In the past week, do you recall seeing any advertisements for these juice brands?

- Tropicana
- Florida's Natural
- Minute Maid
- Ocean Spray
- Simply

Note: For each brand, participants were required to select one of the following options: "Yes", "No".

In the past week, do you recall seeing any advertisements for these shampoo brands?

- Pantene
- Head and Shoulders
- Suave
- Dove
- TRESemmé

Note: For each brand, participants were required to select one of the following options: "Yes", "No".

Have you heard of the following brands? The product type is in brackets.

- Liquid Death (water)
- InkiPenki (stationery)
- GFuel (energy drink)
- Aussie (toiletries)

Note: For each brand, participants were required to select one of the following options: "Yes", "No".

C.2 Multiple Price List Introduction

Now, we would like to offer you a bonus payment for your participation in the study.

It will be **either**:

- a small cash bonus, or
- a gift card for **one of the products** from the brands that we asked you about in the previous section.

For the latter option, please note that the gift card will be for **Amazon** and will **only** work for that type of product.

Your answers to the next few questions will determine the type and the amount of your bonus.

If you receive a gift card as a bonus, we will provide you with the gift card link **immediately**, and you will be able to use it without delay. You can apply the gift card directly to your Amazon account. Note that you will **not** be required to provide us with any personal information such as email address.

C.3 Shampoo Product Introduction

Note: This section appeared only for those assigned to do the MPL with Pantene shampoo products.

The computer randomly selected a product from the brands we asked you about in the previous section of the survey.

Your product is: **Pantene shampoo products**.

Below, we will ask you a series of questions where you need to pick between:

- a cash bonus of a particular amount or,
- an $8 gift card for Pantene shampoo products.

Please note that both the cash bonus and the $8 gift card are **REAL** incentives (you will receive one of them). These are not hypothetical questions.

Consider your answers carefully because the computer will randomly select one of the following questions and give you what you chose in that question.

Click here to learn more about the randomization process.

Note: If participants clicked "here", it would cause the following dot points to be displayed:

- *The computer will randomly select a value of the cash bonus between $0.5 and $8 with increments of $0.5 (i.e., $0.5, $1, $1.5, ..., $7, $7.5, $8). Each value is equally likely.*
- *If your answers on the next few screens indicate that you prefer a cash bonus of the selected value over an $8 gift card for Pantene shampoo products, you will receive the cash bonus.*
- *If your answers on the next few screens indicate that you prefer an $8 gift card for Pantene shampoo products over a cash bonus of the selected value, you will receive the $8 gift card for Pantene shampoo products.*

C.4 Orange Juice Product Introduction

Note: This section appeared only for those assigned to do the MPL with Tropicana orange juice.

The computer randomly selected a product from the brands we asked you about in the previous section of the survey.

Your product is: **Tropicana orange juice**. Tropicana is a U.S. based brand of orange juice founded in Florida in 1947.

Below, we will ask you a series of questions where you need to pick between:

- a cash bonus of a particular amount or,
- an $8 gift card for Tropicana orange juice.

Please note that both the cash bonus and the $8 gift card are **REAL** incentives (you will receive one of them). These are not hypothetical questions.

The gift card can only be used for the selected type of product and will be **valid for 12 months**. Don't worry! Amazon can ship Tropicana orange juice throughout the US. In the unlikely event that it is unavailable, Amazon will be able to ship brands of orange juice and other citrus drinks of similar quality.

Consider your answers carefully because the computer will randomly select one of the following questions and give you what you chose in that question.

Click here to learn more about the randomization process.

- *The computer will randomly select a value of the cash bonus between $0.5 and $8 with increments of $0.5 (i.e., $0.5, $1, $1.5, ..., $7, $7.5, $8). Each value is equally likely.*
- *If your answers on the next few screens indicate that you prefer a cash bonus of the selected value over an $8 gift card for Tropicana orange juice, you will receive the cash bonus.*
- *If your answers on the next few screens indicate that you prefer an $8 gift card for Tropicana orange juice over a cash bonus of the selected value, you will receive the $8 gift card for Tropicana orange juice.*

Please select **all** that apply.

- The gift card will enable me to get an $8 discount on Tropicana orange juice and is valid for 12 months.
- I can use the gift card for any product, such as chocolate.
- Depending on my answers to the following questions, I will receive either a cash bonus or a gift card for orange juice.

C.5 MPL Questions

Please click on the choice that you prefer. Think carefully, if the computer randomly selects this question, you will receive what you choose below.

- A cash bonus of **$X**$_t$.
- An **$8** gift card for Y.

Note: Y was replaced by the product that the participant was assigned to see (either "Pantene shampoo products" or "Tropicana orange juice"). Participants saw this question multiple times, with t=1,2,3,4. The values of X_t followed the following logic:

X_1=4

- *If cash selected, then X_2=2*
  - *If cash selected, then X_3=1*
    - *If cash selected, then X_4=0.5*
    - *If card selected, then X_4=1.5*
  - *If card selected, then X_3=3*
    - *If cash selected, then X_4=2.5*
    - *If card selected, then X_4=3.5*
- *If card selected, then X_2=6*
  - *If cash selected, then X_3=5*
    - *If cash selected, then X_4=4.5*
    - *If card selected, then X_4=5.5*
  - *If card selected, then X_3=7*
    - *If cash selected, then X_4=6.5*
    - *If card selected, then X_4=7.5*

You said that you prefer an $8 gift card for Y over a cash bonus of $7.5. Please state the cash bonus that would make you equally happy as receiving an $8 gift card for Y. Think carefully, as your decision may affect the type of bonus that you receive.

Note: Participants were required to enter a numeric value no smaller than 7.5 with up to two decimal places. This question appeared only for those who selected "An $8 gift card for Y" over "A cash bonus of $7.5". Y was replaced by the product that the participant was assigned to see.

Lastly, please click on the choice that you prefer.

- A cash bonus of **$0**.
- An **$8** gift card for Y.

Note: This question appeared only for those who selected "A cash bonus of $0.5" over "An $8

gift card for Y". Y was replaced by the product that the participant was assigned to see.

C.6 MPL Result and Conclusion

In the previous questions, you were asked to choose between a cash bonus and a gift card for a particular product. Please write down the name of the product as you remember it.

Note: Text entry.

The computer randomly selected one of the possible questions. The selected question corresponds to the cash bonus value of $X.

Your **choices indicate** that you **prefer** the randomly selected cash bonus of $X over an $8 gift card for Y. Therefore, you will receive the cash bonus.

You will receive your cash bonus payment via Prolific on top of your normal compensation for this survey.
Note: X was randomly selected from {0.5, 1, 1.5,...,8} with equal probability. The above text appeared only for those whose MPL answers indicated they prefer the randomly selected cash bonus over the gift card. Y was replaced by the product that the participant was assigned to see.

The computer randomly selected one of the possible questions. The selected question corresponds to the cash bonus value of $X.

Your **choices indicate** that you **prefer** an $8 gift card for Y over the randomly selected cash bonus of $X. Therefore, you will receive the gift card.

Below, we provide your unique Amazon gift card link. You can use this gift card when shopping on Amazon. The gift card's value is $8.

If you have any questions or issues related to using your gift card, please contact jgars87@ufl.edu.

Please record the link and the email address so that you can use them in the future. Please apply the gift card to your Amazon account **only after** you complete the survey and finalize your Prolific submission.

You can click the gift card link HERE.

We also provide the link in text: Z

Note: X was randomly selected from {0.5, 1, 1.5,...,8} with equal probability. The above text appeared only for those whose MPL answers indicated they prefer the gift card over the randomly selected cash bonus. Y was replaced by the product that the participant was assigned

to see. Z was replaced with the URL for the product-specific Amazon gift card. Clicking "HERE" opened the URL.

We have a few final questions for you.

When was the last time that you purchased orange juice?

- Less than 3 days ago.
- 4-7 days ago.
- 8-14 days ago.
- More than two weeks ago.
- I never buy orange juice.

D Supplementary Experiment: Survey 1

In the supplementary experiment study, we closely followed the protocol of survey 1 (Section B) with some key differences. In the demographics section, immediately following question D., we asked an additional question on overall trust for each of five federal agencies on a four-point scale:

D-1. What is your overall level of trust in each of the following agencies and departments of the federal government?

- Environmental Protection Agency (EPA)
- Food and Drug Administration (FDA)
- Federal Reserve
- National Park Service
- Centers for Disease Control and Prevention (CDC)

Likert scale: "Very low trust", "Somewhat low trust", "Somewhat high trust", "Very high trust".

Further, when assigning treatment groups, we assigned one third of the sample to each of the Biden and Trump groups, one sixth to Control, and one sixth to a new group called Pure Control. Those in the Pure Control group immediately finished survey 1 after the demographics section. In the information provided to the remaining three groups, we made some minor changes to ensure the information remained truthful and current as of 2025. We did not present participants with the donation task, but instead showed all participants the planned consumption question.

E Supplementary Experiment: Follow-Up Survey

As with the original experiment, the survey begins with a short demographics (see Section C). Participants were asked about age, state of residence, ethnicity, martial status, employment status, digital platforms used for entertainment, and media used to learn about current affairs. They were not asked about their frequency of ordering take-out, and grocery delivery.

E.1 Acts of Congress

Many laws and policies in the United States are created and influenced by Congress, which consists of the House of Representatives and the Senate. Congress is responsible for passing federal laws, approving budgets, and confirming judicial appointments. In this section, we will ask you a few questions about Congress and congressional politics. Please answer honestly. We don't expect you to know the answer to every question. The goal is to understand your genuine knowledge and opinions, so we ask that you not look things up or use outside help. Your payment will not depend on getting the answers "right," only on paying attention.

How familiar are you with the following laws or bills passed (or debated) in Congress?

- The Civil Rights Act
- The Affordable Care Act
- The CHIPS and Science Act
- Dodd–Frank Wall Street Reform and Consumer Protection Act
- The Telecommunications Act

Note: Each item is rated on a scale from 0 to 100. 0 = "Never heard of it", 25 = "Heard of it, not familiar", 50 = "Somewhat familiar", 75 = "Familiar", 100 = "Very familiar." The order of listed items is randomized.

In the previous question, you saw the Affordable Care Act listed as an example. To the best of your knowledge, during whose presidency was it passed?

- Bill Clinton
- George W. Bush
- Barack Obama
- Donald Trump
- Joe Biden

Note: Multiple choice options were presented in a randomized order.

In the previous question, you saw the Telecommunications Act listed as an example. To the best of your knowledge, during whose presidency was it passed?

- Bill Clinton
- George W. Bush
- Barack Obama
- Donald Trump
- Joe Biden

Note: Multiple choice options were presented in a randomized order.

E.2 Agency Regulations

Many rules and regulations in the United States are created and enforced by federal regulatory agencies. Examples include the Federal Reserve, Environmental Protection Agency (EPA), the Centers for Medicare & Medicaid Services (CMS), and the Federal Communications Commission (FCC). In this section, we will ask you a few questions about regulatory agencies. Please answer honestly. We don't expect you to know the answer to every question. The goal is to understand your genuine knowledge and opinions, so we ask that you not look things up or use outside help. Your payment will not depend on getting the answers "right," only on paying attention.

E.3 Agency Regulations—Recall

Note: the order of sections E.3 and E.4 was randomised with equal probability.

How familiar are you with the following rules or regulations issued by federal agencies?

- FCC rules on equal treatment of internet traffic (net neutrality)
- FDA rules on food nutrition labels
- EPA regulation that allows using antibiotics on citrus crops to fight plant disease
- CMS regulation that requires hospitals to post prices for services online

Note: Each item is rated on a scale from 0 to 100. 0 = "Never heard of it", 25 = "Heard of it, not familiar", 50 = "Somewhat familiar", 75 = "Familiar", 100 = "Very familiar." The order of listed items is randomized.

In the previous question, you saw the FDA rules on food nutrition labels listed as an example. To the best of your knowledge, during whose presidency were these rules first issued?

- George H. W. Bush
- Bill Clinton
- George W. Bush
- Donald Trump
- Joe Biden

Note: Multiple choice options were presented in a randomized order.

In the previous question, you saw the EPA regulation that allows using antibiotics on citrus crops to fight plant disease listed as an example. To the best of your knowledge, during whose presidency were these rules first issued?

- George H. W. Bush
- Bill Clinton
- George W. Bush
- Donald Trump
- Joe Biden

Note: Multiple choice options were presented in a randomized order.

E.4 Agency Trust

On a scale from 0 to 100, where 0 means "no confidence at all" and 100 means "complete confidence," how much confidence do you personally place in each of the following federal agencies?

- Environmental Protection Agency (EPA)
- National Aeronautics and Space Administration (NASA)
- U.S. Postal Service (USPS)

Note: Each agency is rated on a 0–100 scale. Approximate labels: 0 = "No confidence at all," 50 = "Neutral," 100 = "Complete confidence." The order of agencies is randomized.

E.5 Policy Trust

Consider the previously mentioned example of the EPA regulation that allows the use of antibiotics on citrus crops to fight plant disease. To what extent do you agree with the following statements about the scientific analysis the EPA conducted before issuing the regulation?

- I trust the EPA which determined that the policy is safe.
- The scientific evaluation conducted by the EPA was thorough and I trust it.

Note: Each statement is rated on a scale from 0 to 100. 0 = "Strongly disagree," 25 = "Somewhat disagree," 50 = "Neither agree nor disagree," 75 = "Somewhat agree," 100 = "Strongly agree." The order of items is randomized.